

UEA Doctorate in Clinical Psychology

Neuropsychology 1 (NEURO 1)

Module Leads: Dr. Fergus Gracey, Dr. Catherine Ford
2019 Cohort

Module: NEUROPSYCHOLOGY 1
Module co-ordinator: Dr. Fergus Gracey, Dr. Catherine Ford

Aims and Learning Objectives of Module

- The aim of the module is to support trainees to gain the knowledge required to conduct a valid applied neuropsychological assessment, develop neuropsychological formulations, link understanding of underlying brain function (and disorders) with clinical assessment, presenting problems and plan and devise and evaluate interventions.
- The module will cover basic functional neuroanatomy, clinical interviewing, neuropsychological assessment and formulation, neuropathology of different disorders and rehabilitation, and the role of neuropsychology in clinical psychology more broadly.
- It is expected that trainees develop specific competencies through placements across training in order to be proficient in test administration, interpretation, and feedback to others. This will be evaluated through the OSCEs in Year 2 and placement competency sign off.
- The module is based upon the application of neuropsychology to understanding both the objective and subjective aspects of neurological conditions and their interaction, with the aim of fostering a fuller appreciation of the possible influence of brain changes on day-to-day life and the lived experience of people affected by these conditions, both those accessing services as well as family members and carers.
- Perspectives of service users and carers will be represented through use of video clips and inclusion of people with lived experience in teaching sessions. This humanistic orientation of the module is consistent with NHS Values.
- The competencies gained are consistent with the guidelines indicated by Berger (2008) and also map onto specific aspects of the BPS Division of Neuropsychology (DoN) competency framework for the Qualification in Clinical Neuropsychology (DoN, May 2013).

Neuropsychological Assessment:

To support trainees to develop the knowledge required to conduct a valid neuropsychological assessment the module will provide teaching on:

- Historical and theoretical foundations of clinical neuropsychology
- Introduction to functional neuroanatomy – trainees' knowledge will be tested with a quiz on neuroanatomy during the session
- Test theory, psychometrics and interpretation of test scores
- Professional issues including report writing for different audiences and feeding back, ethics and mental capacity
- Approaches to assessment in clinical neuropsychology including clinical interviewing, rating scales, screening tools, use of standardised batteries and individual tests, CT and MRI scans.

Neuropsychological Formulations

To support trainees to be able to develop neuropsychological formulations, linking understanding of underlying brain function and disorders with clinical assessment of presenting problems, the module will provide teaching on:

- Cognitive neuropsychological models (including attention, memory, language, visuo-spatial processing and executive functioning)
- Formulation and hypothesis testing in clinical neuropsychology
- Applied clinical neuropsychology – disorder specific teaching covering neuropsychology of acquired and progressive conditions including ABI, epilepsy, stroke and dementia – each session to cover assessment, formulation, intervention, psychosocial issues, practical and ethical issues. Views of those with lived experience will be included where possible.

Neuropsychological Interventions

To support trainees to develop the ability to devise and deliver neuropsychological interventions (including cognitive rehabilitation and neuropsychotherapeutic interventions) the module will provide teaching on:

- Evidence based and theory based neurocognitive interventions applied across a range of disorders and mental health problems
- Neuropsychotherapeutic approaches (e.g. augmented CBT, neuro-systemic approaches, Compassion Focussed Therapy for people with neurological conditions etc).

Evaluation and Outcome Monitoring in Neuropsychology

To support trainees to develop the ability to evaluate neuropsychological interventions, the module will provide teaching on:

- Application of the WHO International Classification of Functioning to rehabilitation outcome evaluation
- Use and limitations of outcome measures in rehabilitation (covered within intervention teaching)

ASSESSMENT OF LEARNING

Trainees' knowledge will be assessed in the following ways:

- Trainees will set learning objectives regarding use of neuropsychological assessments (administration, scoring, interpretation, feedback, reporting), formulation and intervention during the first year placements.
- Technical competence in neuropsychological assessment and feedback will be formatively assessed at the second year OSCE.
- Technical competence in neuropsychological assessment will be summatively assessed as part of placement competency evaluation and sign off.

The teaching on this module will contribute to trainees learning the following standards of proficiency in line with the HCPC (2015) standards:

1. Be able to practice safely and effectively within their scope of practice
2. Be able to practice within the legal and ethical boundaries of their profession
3. Be able to maintain fitness to practice
4. Be able to practise as an autonomous professional, exercising their own professional judgement
5. Be aware of the impact of culture, equality and diversity on practice
6. Be able to practice in a non-discriminatory manner
7. Understand the importance of and be able to maintain confidentiality
8. Be able to communicate effectively
9. Be able to work appropriately with others
10. Be able to maintain records appropriately
12. Be able to assure the quality of their practice
13. Understand the key concepts of the knowledge base relevant to their profession
14. Be able to draw on appropriate knowledge and skills to inform practice

The teaching on this module will contribute to trainees learning the following standards of proficiency in line with the BPS Competencies:

1. Generalizable meta-competencies
2. Psychological Assessment
3. Psychological Formulation
4. Psychological Intervention
5. Evaluation
6. Research
7. Personal and professional skills and values
8. Communication and teaching
9. Organisational and systemic influence and leadership

NEURO1 Teaching Sessions

TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES
3	Introduction to the neuropsychology module & Introduction to functional neuroanatomy and classic cases in neuropsychology	<p>Objectives of the Introduction to the Neuropsychology Module</p> <ul style="list-style-type: none"> - Understand the overarching objectives of the module with regard to knowledge and skills - Consider own learning needs with regard to clinical neuropsychology and which aspects of training can best meet them <p>Objectives of the Introduction to functional neuroanatomy and classic cases in neuropsychology</p> <p>This aims to provide an introduction to the history of neuropsychology, with a particular focus on classic case studies that demonstrate particular function/deficits related to brain regions and particular methods (e.g. double dissociation; qualitative assessment; single case designs)</p> <ul style="list-style-type: none"> - Understand the historical basis of approaches used in clinical neuropsychology - Revision of functional neuroanatomy - Introduce apps and web resources for learning neuroanatomy - Quiz to test knowledge of neuroanatomy including brain structures, circulation, neurotransmitters
3	Introduction to Neuropsychological Assessment Skills	<p>This session provides an introduction to neuropsychological interview structure and techniques in the context of a broad and flexible framework for neuropsychological assessment. Role-play activities and small group work will be used.</p> <p>Objectives:</p> <ul style="list-style-type: none"> - To be able to make sense of referral questions in neuropsychology - To select methods to address the question –psychometric, ecologically valid, cognitive model, qualitative, interviewing, self/other ratings - To increase confidence and skill in clinical interviewing in neuropsychology - To have awareness of factors impacting clinical interviewing - To know key processes/tools that facilitate a good clinical interview - To be aware of resources available for further learning and skill development

TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES
3	Test theory, psychometrics and test interpretation	<p>This session will cover statistical theory underpinning standardised test development, the standardisation process and the derivation and interpretation of various standardised scores. The session will include worked examples and group work making use of Wechsler (WAIS, WASI, WMS) test manuals and materials.</p> <p>Objectives:</p> <ul style="list-style-type: none"> - Familiar with the basis of and able to interpret commonly used metrics such as Z scores, T scores, percentiles, Wechsler scaled scores and Index scores, conversion of scores - Understanding of reliability and validity in test interpretation including confidence intervals, standard error of measurement - Understand meaning and limitation of age equivalent scores - Understand the base rate issues when multiple tests applied - Understand issues when attempting to measure change in test performance
3	Cognitive Neuropsychological Models	<p>Objectives:</p> <ul style="list-style-type: none"> - Gain knowledge of theoretical models of normal cognitive function in neuropsychology including attention, memory, executive functioning, visuo-spatial processing and language - Understand how these models have been applied in making sense of the effects of specific lesions or disorders - Understand the application of a bio-psycho-social framework for understanding presenting problems of those with cognitive impairment
3	Test administration and selection	<p>This session will cover clinical and psychometric considerations in the flexible approach to assessment, including screening tools (ACE-III; MoCA), and ecologically valid tests such as the BADS, TEA and RBMT</p> <p>Objectives:</p> <ul style="list-style-type: none"> - Ability to select, use and interpret specific neuropsychological assessments when used in a flexible assessment approach - Knowledge of common screening tools and understanding of psychometric strengths and limitations including sensitivity and specificity - Understand practical issues regarding assessment procedures, and impact of conditions on assessment processes and outcomes (across all settings including mental health)

TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES
3	Formulation in neuropsychology	<p>Objectives:</p> <ul style="list-style-type: none"> - Gain familiarity with application of the WHO –International Classification of Functioning, and the Biopsychosocial model - Use of cognitive models and hypothesis testing approach in neuropsychology - Understand integrated psychological formulations (e.g., CBT, systemic, incorporating neurocognitive, emotion, and adjustment) - Practice formulation with case examples - Understand the mental capacity act both with regard to consent to assessment and occasions when a neurocognitive assessment might contribute to the assessment of a mental capacity issue (signpost to specific teaching on MCA)
6	Neuropsychology of Dementia	<p>Objectives</p> <ul style="list-style-type: none"> - Understand the nature of different types of dementia - Gain knowledge of the neurocognitive profiles and neuroanatomy of types of dementia - Practice application of learning through case examples of differential diagnoses - Consider the subjective impact of dementia from the perspective of the person with dementia, family, carers and healthcare professionals
3	Feeding back and report writing	<p>Objectives:</p> <ul style="list-style-type: none"> - Understand rationale of report writing - Be familiar with examples of report style (guided reading) including feedback of effort testing. - Apply to specific case examples (adult/older adult/dementia) - Gain skills in feeding back neuropsychology assessment results through role play - Understand approaches for testing for effort and reporting this
3	Neurocognitive interventions	<p>Objectives – to gain knowledge of evidence based cognitive interventions across common disorders including dementia, stroke, TBI, eating disorders and schizophrenia) covering:</p> <ul style="list-style-type: none"> - Memory, Executive function, Attention and Visual processing - Cognitive remediation in schizophrenia and eating disorders - Impact of social and emotional processes on cognition

TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES
1	Neuroradiology and scan interpretation	<p>Objectives:</p> <ul style="list-style-type: none"> - Basics of how a CT scan works, what it is used for, and how to read the scan - Basic physics of different types of MRI scan including DTI, how each is used to show different structures or types of damage/change - Opportunity to rehearse neuroanatomy - Case examples illustrating specific disorders
2	Acquired Brain Injury (including TBI and encephalitis)	<p>Objectives:</p> <ul style="list-style-type: none"> - Understanding the types and mechanisms of acquired brain injuries and neuroanatomical consequences – opportunity to rehearse neuroanatomical knowledge and understand scans - The neuropsychological consequences of different types of injury across the lifespan – opportunity to rehearse test selection in response to referral questions - Understanding core clinical information – how to read a referral letter or discharge report, opportunity to rehearse neuro assessment and formulation skills
3	Neuropsychology of Stroke	<p>Objectives:</p> <ul style="list-style-type: none"> - Understand the nature of different types of stroke - Understand the neuropsychological consequences of different types of stroke - Rehearse cognitive models pertinent to understanding the specific consequences of stroke - Rehearse use of screening tools in identification of cognitive difficulties following stroke - Rehearse neuroanatomy and circulation knowledge - Gain knowledge of interventions for psychological support after stroke (case example, psychological impact of stroke, clinical psychology input, stepped care in stroke psychology) and clinical guidelines
3	Biological Basics of Epilepsy and Neuropsychological aspects of Epilepsy	<p>Biological basis of epilepsy</p> <ul style="list-style-type: none"> - Biological basis of epilepsy - Categorising and describing types of seizure - Assessment and interventions

TIME ALLOCATED	TEACHING SESSION TITLE	LEARNING OBJECTIVES
	Biological Basics of Epilepsy and Neuropsychological aspects of Epilepsy	Neuropsychological aspects of epilepsy <ul style="list-style-type: none"> - Neuropsychological aspects of epilepsy - Acute and long term neuropsychological changes, including those related to medication - Role of the clinical neuropsychologist in epilepsy surgery - Psychological aspects of epilepsy and interventions
3	Clinical neuropsychology of long-term and progressive neurological conditions	Objectives: <ul style="list-style-type: none"> - Be able to describe the nature of different types of progressive neurological disorders, such as Multiple Sclerosis and Parkinson's Disease. - Recognise the neurocognitive profiles and neuroanatomy of these conditions. - Consider the subjective impact of progressive neurological disorders from the perspective of the person with the condition, family, carers and healthcare professionals. - Practice application of learning through discussion / case examples.
3	Psychotherapeutic approaches in the context of neuropsychological conditions	Objectives: <ul style="list-style-type: none"> - Gain awareness of evidence base for addressing psychological needs in neuropsychological conditions - Develop an understanding of clinically applicable models for reducing distress and also improving well-being - Learn the key areas and approaches for adapting psychological therapies to take cognitive impairment into account - Be able to apply at least one model to formulate a case integrating neuropsychological and emotional processes - Be able to develop an adapted intervention plan taking into account service user experiences, preferences, family context, service context, cognitive issues, models and evidence base

References:

Key references will also be provided for each lecture in the module.

White, C. Cognitive behaviour therapy for chronic medical problems (2001). Wiley

Trevor Powell (2004). Head Injury: A practical guide.

Andrewes, D. (2002) Neuropsychology: From theory to practice. Psychology Press, Taylor & Francis.

Vanderploeg, R.D. (Ed.). (2000) Clinician's guide to neuropsychological assessment. Oxford University Press.

Classic texts and case histories

Broks, Paul (2003). *Into the Silent Land: Travels in Neuropsychology*. New York, NY: Atlantic Monthly Press.

Luria, A.R. (1987) *The Man with a Shattered World: The History of a Brain Wound*. Cambridge, MA: Harvard University Press

Sacks, O. (1985). *The man who mistook his wife for a hat*. London, England: Picador.

Links for human brain anatomy websites and apps

Cerebrii - iOS compatible app - 3D rotatable pictures of brain structures including grey matter, white matter, circulation – can search for terms, label and also has a quiz.
<https://itunes.apple.com/gb/app/cerebrii/id309653027?mt=8>

Brain areas (3D, rotatable) labeled with links to information about that brain region
<http://www.healthline.com/human-body-maps/brain>

Navigable brain atlas – good for identifying specific brain areas and understanding scans
http://www.thehumanbrain.info/brain/bn_brain_atlas/brain.html

Information about major areas of the brain and their function:
<http://biology.about.com/od/humananatomybiology/a/anatomybrain.htm>

Followed by a brain anatomy quiz!
<http://biology.about.com/od/gamesandquizzes/a/aa092107a.htm>

E-learning course for clinical neurosciences – multiple modules on specific disorders and rehabilitation
<http://www.ebrainjnc.com/index.html>

Online tool for training in the administration of the ACE III by John Evans and colleagues
<https://www.fom.gla.ac.uk/aceiiiitrainer/>

An iPad version of the ACE III
<http://www.cnpsychology.co.uk/>

Underpinning knowledge and skills – neuropsychological competencies (books that cover a range of learning objectives/competencies)

Baddeley, A., Kopelman, M.D. & Wilson B.A. (2004). *The Essential Handbook of Memory Disorders for Clinicians*. Chichester, England: John Wiley & Sons Ltd.

Feinberg, T. E. & Farah, M. J., editors (2003). *Behavioural Neurology and Neuropsychology*. New York: McGraw-Hill (Second Edition).

Goldstein, L.H., & McNeil, J.E. (2012). *Clinical neuropsychology: A practical guide to assessment and management for clinicians* (2nd Edition): Chichester, England: Wiley-Blackwell.

Chapters cover a range of issues in sections relating to assessment, intervention, patient groups, theory etc.

Kolb, B. and Wishaw, I.Q. (2003). *Fundamentals of Human Neuropsychology*. Worth Publishers, New York (5th Edition).

Manly, T., Evans, J. J., Fish, J. E., Gracey, F. & Bateman, A. (2013). Cognitive Rehabilitation following Traumatic Brain Injury. In H. Levin, D. Shum & R. Chan (Eds) *Understanding Traumatic Brain Injury: Current Research and Future Directions* (pp. 215-234) Oxford, England: OUP.

Covers domains of cognitive functioning and interventions/rehabilitation, outcome measurement and TBI in childhood and older adults

Richards, D., Clark, T. & Clarke, C. (2007). *The Human Brain and its disorders*. Oxford University Press.

Conceptual approaches adopted in clinical neuropsychology & their historical foundations

Bernabeu, M., Laxe, S., Lopez, R., Stucki, G., Ward, A., Barnes, M., ... Cieza, A. (2009). Developing core sets for persons with traumatic brain injury based on the International Classification of Functioning, Disability, and Health. *Neurorehabilitation and Neural Repair*. 23, 464-467.

Tate, R.L., & Perdices, M. (2008). Applying the international classification of functioning, disability and health (ICF) to clinical practice and research in acquired brain impairment. *Brain Impairment*, 9 (03). 282-292. doi: doi:10.1375/brim.9.3.282

Practically helpful paper covering aspects of the ICF and its application in assessment and rehab in a systematic way

World Health Organization (2007). *International classification of functioning, disability, and health: Children & youth version: ICF-CY*. Retrieved from: http://apps.who.int/iris/bitstream/10665/43737/1/9789241547321_eng.pdf

Clinical work – neuropsychological competencies

o Assessment

Andrewes (2002) *Neuropsychology: From Theory to Practice*. Psychology press.

Groth-Mamat, G. (Ed.). (2000). *Neuropsychological Assessment in Clinical Practice*. New York, NY: Wiley.

- Hodges, J. (2007). *Cognitive Assessment for Clinicians*. Oxford, England: Oxford University Press.
- Hsieh, H., McGrory, S., Leslie, F. et al. (2015). The Mini-Addenbrooke's Cognitive Examination: A new assessment tool for dementia. *Dementia and Geriatric Cognitive Disorders*, 39, 1-11.
- Larrabee (2005) *Forensic Neuropsychology: A Scientific Approach*. Oxford University Press
- Lezak, M., Howieson, D.B., Loring, D.W., Hannay, J.H. & Fischer, J.S. (2004). *Neuropsychological assessment. Fourth Edition*. Oxford, England: Oxford University Press.
- Mesulam (2000) *Principles of Behavioural and Cognitive Neurology*. Oxford University Press.
- Morrison, J. (2014). *The First Interview* (4th Ed.). New York, NY: Guilford Press.
- Sommers-Flanagan, J. & Sommers-Flanagan, R. (2008). *Clinical Interviewing* (4th Ed.). Chichester, England: John Wiley & Sons Ltd.
- Strauss, E., Sherman, E.M.S. & Spreen, O. (2006). *A Compendium of neuropsychological tests: Administration, norms, and commentary*. (3rd. ed.). New York, NY: Oxford University Press.
- Tulsky (2003) *Clinical Interpretation of the WAIS-III and WMS-III*. Academic Press.
- Vanderploeg (1999) *Clinician's guide to neuropsychological assessment 2nd edition*. Psychology Press.
- Wilson, B.A (2004) Assessment of Memory Disorders, In: D. Baddeley, M. D. Kopelman, & B.A. Wilson (Eds.) *The Essential Handbook of Memory Disorders for Clinicians* (pp. 159-178) Chichester, England: John Wiley & Sons Ltd.
- **Profiles of specific disorders**
- Brown, J. (2014). The use and misuse of short cognitive tests in the diagnosis of dementia. *Journal of Neurology, Neurosurgery & Psychiatry*. Advance online publication. doi:10.1136/jnnp-2014-309086
- Graham, N.L., Emery, T. & Hodges, J.R. (2004). Distinct cognitive profiles in Alzheimer's disease and subcortical vascular dementia. *Journal of Neurology, Neurosurgery & Psychiatry*, 75, 61-71.
- McKeith, I., Mintzer, J., Aarsland, D., Burn, D., Chiu, H., Cohen-Mansfield, J., ... Reid, W. (2004). Dementia with Lewy Bodies. *The Lancet Neurology*, 3 (1). 19-28. doi:10.1016/S1474-4422(03)00619-7
- Perri, R., Monaco, M., Fadda, L., Caltagirone, C. & Carlesimo, G. A. (2014). Neuropsychological correlates of behavioural symptoms in Alzheimer's disease, frontal variant of Frontotemporal, subcortical vascular and lewy bodies dementia: A comparative study. *Journal of Alzheimer's disease*, 39, 3, 669-677.
- Weintraub, S., Wicklund, A. H. & Salmon, D. P. (2012). The Neuropsychological profile of Alzheimer's disease. *Cold Spring Harbour Perspectives in Medicine*, 2(4) doi: 10.1101/cshperspect.a006171

- **Formulation and intervention / rehabilitation**

Karnac – The Brain Injury Series:

Bowen, C., Yeates, G. & Palmer S. (2010). *A relational approach to rehabilitation: Thinking about relationships after brain injury*. London, England: Karnac.

Sets out a radical systemic and relational perspective on brain injury and rehabilitation, including case illustrations and descriptions of intervention approaches.

There are other books on rehabilitation in this Karnac series.

Wilson, B. A., Gracey, F., Evans, J. J. & Bateman, A. (2009). *Neuropsychological Rehabilitation: Theory, Models, Therapy and Outcome*. Cambridge, England: Cambridge University Press.

Description of holistic neuropsychological rehabilitation including theory, information on group interventions and individual case studies

Winston, R., Wilson, B. A. and Bateman, A. (2016) *The Brain Injury Rehabilitation Workbook*. New York: Guilford.

Accessible guidance to interventions with photocopyable resources - for use with families and service users covering domains of cognitive functioning, participation, family and psychological issues.

Wilson, B. A., Winegardner, J., van Heugten, C. M. and Ownsworth, T. (2017) *Neuropsychological Rehabilitation: The International Handbook*. Oxford: Routledge.

Very thorough coverage of a wide range of applications including psychotherapeutic interventions, domains of cognitive functioning and disorders.

Reed, J, Byard, K & Fine, H (2015) *Neuropsychological Rehabilitation of Childhood Brain Injury: A Practical Guide*. Basingstoke: Palgrave Macmillan.

Tate, R & Perdices, M. (2018). *Single-Case Experimental Designs for Clinical Research and Neurorehabilitation Settings (Neuropsychological Rehabilitation: A Modular Handbook)*. London, England: Routledge.

Evidence base for cognitive rehabilitation

- **Adults**

Bayley, M. T., Tate, R., Douglas, J. M., Turkstra, L. S., Ponsford, J., Stergiou-Kita, M., . . . Bragge, P. (2014). Incog guidelines for cognitive rehabilitation following traumatic brain injury: Methods and overview. *The Journal of head trauma rehabilitation, 29*(4), 290-306.

Cicerone, K.D., Langenbahn, D.M., Braden, C., Malec, J.F., Kalmar, K., Fraas, M., . . . Ashman, T. (2011). Evidence-based cognitive rehabilitation: Updated review of the literature from 2003 through 2008. *Archives of Physical Medicine and Rehabilitation, 92*(4), 519-530. doi: 10.1016/j.apmr.2010.11.015

Ponsford, J., Bayley, M., Wiseman-Hakes, C., Togher, L., Velikonja, D., McIntyre, A., . . . Tate, R. (2014). Incog recommendations for management of cognition following traumatic brain injury, part ii: Attention and information processing speed. *The Journal of head trauma rehabilitation, 29*(4), 321-337. doi:10.1097/HTR.0000000000000072

INCOG – International guidelines on rehabilitation of different types of cognitive impairment following TBI

Rohling, M.L., Faust, M.E., Beverly, B., & Demakis, G. (2009). Effectiveness of cognitive rehabilitation following acquired brain injury: A meta-analytic re-examination of cicerone et

- al.'s (2000, 2005) systematic reviews. *Neuropsychology*, 23(1), 20-39. doi: 10.1037/a0013659
- Tate, R., Kennedy, M., Ponsford, J., Douglas, J., Velikonja, D., Bayley, M., & Stergiou-Kita, M. (2014). Incog recommendations for management of cognition following traumatic brain injury, part iii: Executive function and self-awareness. *The Journal of head trauma rehabilitation*, 29(4), 338-352.
- Togher, L., Wiseman-Hakes, C., Douglas, J., Stergiou-Kita, M., Ponsford, J., Teasell, R., . . . Turkstra, L. S. (2014). Incog recommendations for management of cognition following traumatic brain injury, part iv: Cognitive communication. *The Journal of head trauma rehabilitation*, 29(4), 353-368. doi:10.1097/htr.000000000000071
- Velikonja, D., Tate, R., Ponsford, J., McIntyre, A., Janzen, S., & Bayley, M. (2014). Incog recommendations for management of cognition following traumatic brain injury, part v: Memory. *The Journal of head trauma rehabilitation*, 29(4), 369-386.
- **Children**
- Ross, K.A., Dorris, L., & McMillan, T. (2011). A systematic review of psychological interventions to alleviate cognitive and psychosocial problems in children with acquired brain injury. *Developmental Medicine and Child Neurology*, 53(8), 692-701. doi: 10.1111/j.1469-8749.2011.03976.x
- **Professional Practice**
- Division of Neuropsychology (2012). Qualification in Clinical Neuropsychology, candidate handbook. <http://exams.bps.org.uk/exams/clinical-neuropsychology/qcn.cfm>
- NSF for long term conditions http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4105361
- World Health Organisation, International Classification of Functioning, Disability, and Health <http://www.who.int/classifications/icf/training/icfbeginnersguide.pdf>
- British Society of Rehab Medicine – guidance for commissioners – describes service, structures, needs and evidence-based interventions for acquired and progressive neuro conditions. http://www.bsrm.co.uk/publications/NeuroRehabBriefing%20Paper-Revised-nov09June10%20_2_.pdf
- The National Dementia Strategy (2009). <https://www.gov.uk/government/publications/living-well-with-dementia-a-national-dementia-strategy>
- Scottish Intercollegiate Guidelines Network (SIGN). (2013). *Brain injury rehabilitation in adults* (SIGN publication no. 130). Edinburgh: SIGN; Retrieved from: <http://www.sign.ac.uk/pdf/sign130.pdf>
- Intercollegiate Stroke Working Party. (2016). *National clinical guideline for stroke* (5th edition). London: Royal College of Physicians. Retrieved from: <https://www.rcplondon.ac.uk/guidelines-policy/stroke-guidelines>
- NSF for long term conditions http://www.dh.gov.uk/en/Publicationsandstatistics/Publications/PublicationsPolicyAndGuidance/DH_4105361