Supplementary Material

Applying implementation science theories to support practice change in the assessment of cognition by occupational therapists

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Supplementary Table S1. Mapping the identified TDF Barriers to intervention functions and strategies (Supplementary table)

COM- B	TDF Domain	TDF Barriers	Intervention Functions	Intervention Strategies
CAPABILITY Physical Capability	Physical Skills	• Skill in giving clear instructions for, i.e., CAM.	• Training	• Videos demonstrating all cognitive assessments
Psychological capability	Knowledge	• Knowledge of key evidence and guidelines underpinning the selection of assessments • Knowing who, what level to assess, when to assess and reassess. • Knowledge of linking impairments on assessment with interventions.	• Education	• In-service Education (recorded) on: - Clinical Practice guidelines - Timing of assessments and justification - Evidence and rationale for selection of assessments - Psychometric properties - Issues with using non-standardised assessments.
	Cognitive and Interpersonal Skills	• Ability to engage patients in the assessment process. • Providing / communicating appropriate Education on cognitive impairments	• Training	• Videos demonstrating how to complete cognitive assessments. • Scripts and script cards on how to introduce and feedback on cognitive assessment
	Memory, attention, and decision processes	• Decision making for people with co-morbidities; delirium, ETOH, drugs, SL imp, when to complete assessments • Linking observations/formalising errors from functional assessments to standardised assessments. • Deciding what to use for people who cannot tolerate a whole Ax, i.e. CAM	• Training • Environmental restructuring • Enablement	• Script cards to support explaining the need for cognitive assessment to patients. • Posters of the cognitive assessment framework are displayed within the Occupational therapy department offices. • Templates to support writing up assessments and interpretation. • Copies of the updated framework in cue card and poster form. • Quick reference guides for each assessment

COM- B	TDF Domain	TDF Barriers	Intervention Functions	Intervention Strategies
OPPORTUNITY Physical Opportunity	Environmental context and resources	• Environment, space, and noise • Access to kit and photocopying • Prioritising/ high caseloads • Structuring functional assessment observations to note cognitive errors. • Locating previous cog assessments, /access to neuropsychology results • Length of time to complete assessments	• Training • Environmental restructuring • Enablement	• Laminated script card to enhance their ability to explain reasons for the need for cognitive assessment to patients. • Posters of the cognitive framework within the Occupational therapy Department offices • Templates to support writing up assessments and interpretation. • Copies of the cognitive framework provided to all staff
MOTIVATION Reflexive Motivation	Beliefs capabilities	• Capability in linking assessment results to function and then to rehabilitation recommendations. • Capability to provide feedback on impairments and provide Education to patients. • Belief in abilities to select assessments	• Education • Modelling • Enablement	• Inservice training to include mapping assessment results to key recommendations in CPGs.' • Script card to explain the need for cognitive assessment to patients. • Posters of the cognitive assessment framework to be displayed within the Occupational Therapy Department Offices. • Example templates for medical records to support writing up assessments and interpretation. • Copies of the cognitive assessment framework to be provided to all staff
	Beliefs about consequences	• Communicating results and implications/ consequences for discharge	• Education • Modelling	• Inservice training (as above)
	Intentions	• Not following through assessment in acute due to caseload.	• Education • Modelling	• Inservice training (as above)
Automatic Motivation	Emotion	• Anxious to introduce the idea of cognitive assessment to a patient	• Modelling • Enablement	• Script cards (as above)

COM-B = capability, opportunity, and motivation behaviour system, TDF = Theoretical Domains Framework, CAM = Cognitive Assessment of Minnesota, CPG = Clinical Practice Guideline.

Supplementary Table S2: File Audit (1 and 2) of administered cognitive assessments

	File Audit 1 n =150 (%)	File Audit 2 n=150 (%)
Files containing cog Ax	40 (26)	52 (34)
Number of cog Ax	52 (35)	67 (45)
Files containing >1 Ax	12 (30)	13 (25)
Diagnosis		
TBI	27 (68)	36 (67)
Stroke	3 (7)	2(4)
Dementia	10 (25)	16 (29)
Sex		
Male	31 (72)	33(63)
Female	12 (28)	19(37)
Age		
Mean (range)	55 (19-88)	58 (17-94)
Working/ Studying		
Yes	19(47)	22(41)
No	18(45)	28(53)
Unknown	3(8)	3(6)
Ax aligned to the framework	40 (100)	52 (100)
Ax administered.		
WPTAS	13	7
APTAS	5	3
O-Log	5	32
CAM	16	14
Kettle Test	3	2
RPQ-13	6	7
RUDAS	1	1
Implication/ interpretation of Ax documented.		
Yes	33(82)	44(85)
Partial/ Minimal	4(10)	6(11)
No	3(8)	2(4)
Recommendation/ plans documented.		
Yes	33 (82)	46 (88)
Partial/ Minimal	5(10)	4(8)
No	2(8)	2(4)