CNS Vital Signs Clinical Report Sample

CNS Vital Signs Clinical Report	Test Date: July 23 2011 10:48:38
Subject ID:	Administrator: Technician
Language: English (United States)	Age: 27

Patient Profile:	Percentile Range				> 74	25 - 74	9 - 24	2 - 8	< 2
	Standard Score Range				> 109	90 - 109	80 - 89	70 - 79	< 70
Domain Scores	Subject Score	Standard Score	Percentile	VI**	Above	Average	Low Average	Low	Very Low
Neurocognition Index (NCI)	NA	85	16	Yes			x		
Composite Memory	102	103	58	Yes		x			
Verbal Memory	51	93	32	Yes		x			
Visual Memory	51	110	75	Yes	x				
Processing Speed	48	79	8	Yes				x	
Executive Function	34	75	5	Yes				x	
Psychomotor Speed	174	93	32	Yes		x			
Reaction Time*	555	107	68	Yes		x			
Complex Attention*	21	56	1	Yes					x
Cognitive Flexibility	26	63	1	Yes					x
Total Test Time (min: secs)		29:12			Total time taken to complete the tests shown.				

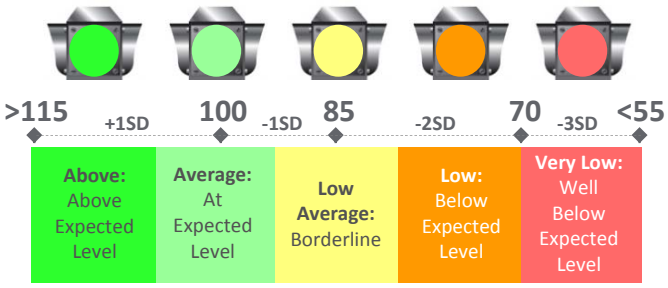
1 2 3 4 5

Domain Dashboard: Above averag[illegible]ain sc[illegible]icate a[illegible]rd sco[illegible] greater than 109 or a Percentile Rank (PR) greater than 74, indicating a high functioning test subject. Average is a [illegible] 90-109 o[illegible] 25-74, indicating normal function. Low Average is a SS 80-89 or PR 9-24 indicating a slight deficit or impairment. Below Average is a SS 70-79 or PR 2-8, indicating a moderate level of deficit or impairment. Very Low is a SS less than 70 or a PR less than 2, indicating a deficit and impairment. Reaction times are in milliseconds. An * denotes that "lower is better", otherwise higher scores are better. Subject Scores are raw scores calculations generated from data values of the individual subtests.

VI – Validity Indicator:** Denotes a guideline for representing the possibility of an invalid test or domain score. "No" means a clinician should evaluate whether or not the test subject understood the test, put forth their best effort, or has a clinical condition requiring further evaluation.

Verbal Memory Test (VBM)	Score	Standard	Percentile	
Correct Hits - Immediate	13	102	55	**Verbal Memory Test:** Subjects have to remember 15 words and recognize them in a field of 15 distractors. The test is repeated at the end of the battery. The VBM test measures how well a subject can recognize, remember, and retrieve words e.g. exploit or attend literal representations or attribute. "Correct Hits" refers to the number of target words recognized. Low scores indicate verbal memory impairment.
Correct Passes - Immediate	14	95	37	
Correct Hits - Delay	9	85	16	
Correct Passes - Delay	15	109	73	
Visual Memory Test (VIM)	**Score**	**Standard**	**Percentile**	
Correct Hits - Immediate	13	107	68	**Visual Memory Test:** Subjects have to remember 15 geometric figures, and recognize them in a field of 15 distractors. The test is repeated at the end of the battery. The VIM test measures how well a subject can recognize, remember, and retrieve geometric figures e.g. exploit or attend symbolic or spatial representations. "Correct Hits" refers to the number of target figures recognized. Low scores indicate visual memory impairment.
Correct Passes - Immediate	14	117	87	
Correct Hits - Delay	13	111	77	
Correct Passes - Delay	11	93	32	
Finger Tapping Test (FTT)	**Score**	**Standard**	**Percentile**	
Right Taps Average	64	104	61	The **FTT** is a test of motor speed and fine motor control ability. There are three rounds of tapping with each hand. The FTT test measures the speed and the number of finger-taps with each hand. Low scores indicate motor slowing. Speed of manual motor activity varies with handedness. Most people are faster with their preferred hand but not always.
Left Taps Average	60	105	63	
Symbol Digit Coding (SDC)	**Score**	**Standard**	**Percentile**	
Correct Responses	50	80	9	The **SDC** test measures speed of processing and draw upon several cognitive processes simultaneously, such as visual scanning, visual perception, visual memory, and motor functions. Errors may be due to impulsive responding, misperception, or confusion.
Errors*	2	92	30	
Stroop Test (ST)	**Score**	**Standard**	**Percentile**	
Simple Reaction Time*	231	108	70	The **ST** measures simple and complex reaction time, inhibition / disinhibition, mental flexibility or directed attention. The ST helps assess how well a subject is able to adapt to rapidly changing and increasingly complex set of directions. Prolonged reaction times indicate cognitive slowing / impairment. Errors may be due to impulsive responding, misperception, or confusion.
Complex Reaction Time Correct*	542	100	50	
Stroop Reaction Time Correct*	568	112	79	
Stroop Commission Errors*	8	5	1	
Shifting Attention Test (SAT)	**Score**	**Standard**	**Percentile**	
Correct Responses	47	82	12	The **SAT** measures executive function or how well a subject recognizes set shifting (mental flexibility) and abstraction (rules, categories) and manages multiple tasks simultaneously. Subjects have to adjust their responses to randomly changing rules. The best scores are high correct responses, few errors and a short reaction time. Normal subjects may be slow but accurate, or fast but not so accurate. Attention deficit may be apparent.
Errors*	13	75	5	
Correct Reaction Time*	1003	97	42	
Continuous Performance Test (CPT)	**Score**	**Standard**	**Percentile**	
Correct Responses	40	104	61	The **CPT** measures sustained attention or vigilance and choice reaction time. Most normal subjects obtain near-perfect scores on this test. A long response time may suggest cognitive slowing and/or impairment. More than 2 errors (total) may be clinically significant. More than 4 errors (total) indicate attentional dysfunction.
Omission Errors*	0	104	61	
Commission Errors*	0	108	70	
Choice Reaction Time Correct*	400	99	47	

Evaluate Status or Level of Impairment



Neurocognitive Domain Dashboard

Patient Profile:	Percentile Range				> 74	25 - 74	9 - 24	2 - 8	< 2
	Standard Score Range				> 109	90 - 109	80 - 89	70 - 79	< 70
Domain Scores	Subject Score	Standard Score	Percentile	VI**	Above	Average	Low Average	Low	Very Low
Neurocognition Index (NCI)	NA	85	16	Yes			x		
Composite Memory	102	103	58	Yes		x			
Verbal Memory	51	93	32	Yes		x			
Visual Memory	51	110	75	Yes	x				
Processing Speed	48	79	8	Yes				x	
Executive Function	34	75	5	Yes				x	
Psychomotor Speed	174	93	32	Yes		x			
Reaction Time*	555	107	68	Yes		x			
Complex Attention*	21	56	1	Yes					x
Cognitive Flexibility	26	63	1	Yes					x
Total Test Time (min: secs)		29:12			Total time taken to complete the tests shown.				

1 2 3 4 5

SD = Standard Deviation from the MEAN

CNS Vital Signs presents testing results in Subject (raw) Scores, Standard Scores, Percentile Rank Scores and Valid Test Indicator (VI). Results obtained from a CNS Vital Signs assessment can be used to evaluate or monitor a patient's condition and the subsequent treatment and management of the patient. Below, is a description of each scoring results category:

1. ***Subject Scores*** are *computed from raw score calculations using the data values of individual subtests and are simply the number of correct responses, incorrect responses, and reaction times. Reaction times are in milliseconds. An ASTERISK (*) denotes that "lower score is better" e.g., timing, otherwise "higher scores are better."*
2. ***Standard Scores*** *are normalized from raw scores and present an age matched score relative to other people in a normative sample. CNS Vital Signs' standardized scores have a mean of 100 and a standard deviation of 15. Higher scores are always better. The schema where the mean is 100 and the standard deviation is 15 is similar to the presentation of IQ scores where the mean for normal is 100.*
3. ***Percentile Rank Score*** *is a mathematical transformation of the standard score and an index of how the subject scored compared to other subjects of the same age on a scale of 1 to 99. If an individual obtained a score at the 52nd percentile (50th percentile is average), this would mean that their performance would be equal to 52% of his same-aged peers in the general population. Higher scores are always better.*
4. ***Validity Indicator (VI):*** *When analyzing test data, either in research, or in clinical practice, it is important to know whether a test result is valid or not. Clinicians need to know if testing subjects are generating "dubious results" or a "non-credible response pattern." CNS Vital Signs has developed "validity indicators" for its tests and domains that indicate whether the patient gave poor effort or generated invalid results (feigning, malingering, etc.) Across the span of neurological and psychiatric disorders, it is important to have "valid" tests to get a true evaluation of a patient.*

Severity Classification Grade:

Above:	**> 110**	High Function and High Capacity
Average:	**90 - 110**	Normal Function and Normal Capacity
Low Average:	**80 - 90**	Slight Deficit and Slight Impairment
Low:	**70 -79**	Moderate Deficit and Impairment Possible
Very Low:	**< 70**	Deficit and Impairment Likely

Standard Scores

Quick View Age-Matched Normative Scores 5