

# Neuropsychological Assessment Procedure Training: **Certification**

LIMBIC-CENC, Prospective Longitudinal Study

Neuropsychological Assessment Certification

# **Procedural components**

Administration, Documentation, & Scoring

# Procedural components

- Validity and reliability of neuropsychological assessment data depend upon **3 fundamental procedural components:**



Administration

Documentation

Scoring

# Procedural components

## Definitions

- Each component requires understanding and demonstration of distinct procedure

### Administration

All activities performed by the examiner to ensure that the participant understands the given task and executes the task according to the standardized assessment regulations

### Documentation

All recording of participant responses performed by the examiner during administration, as well as review and finalization of source documentation following visit completion

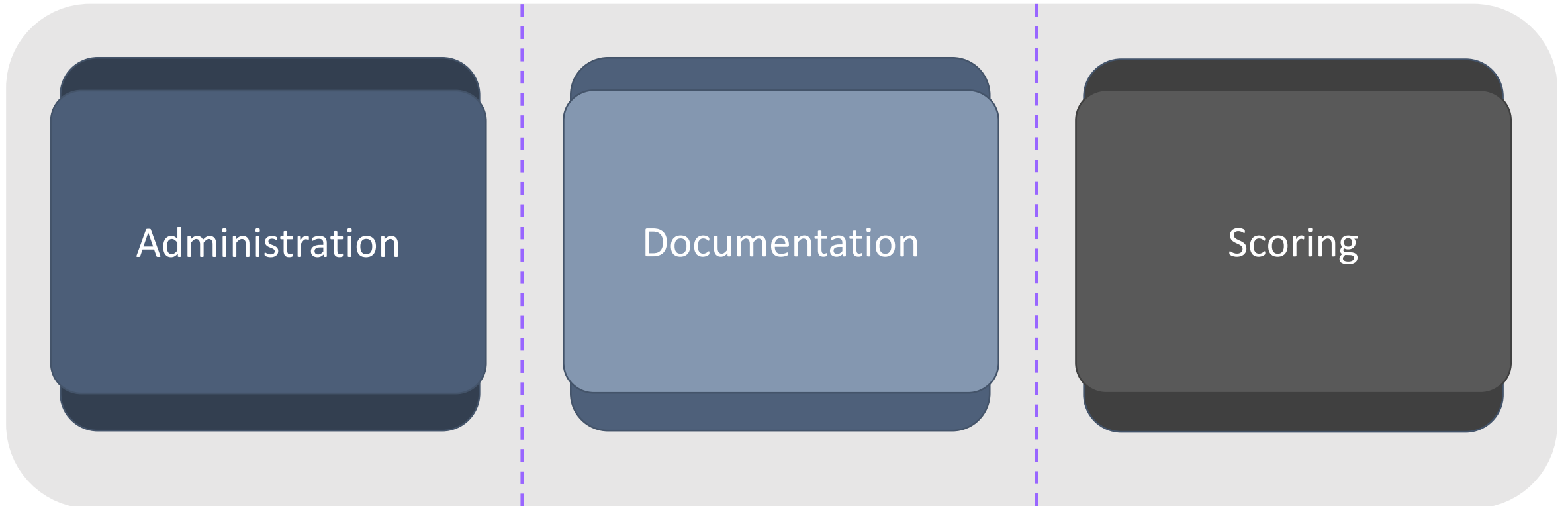
### Scoring

All data interpretation, calculation, and normative value retrieval performed by the examiner, which ultimately quantify participant responses and performance, to enable clinical evaluation

# Procedural components

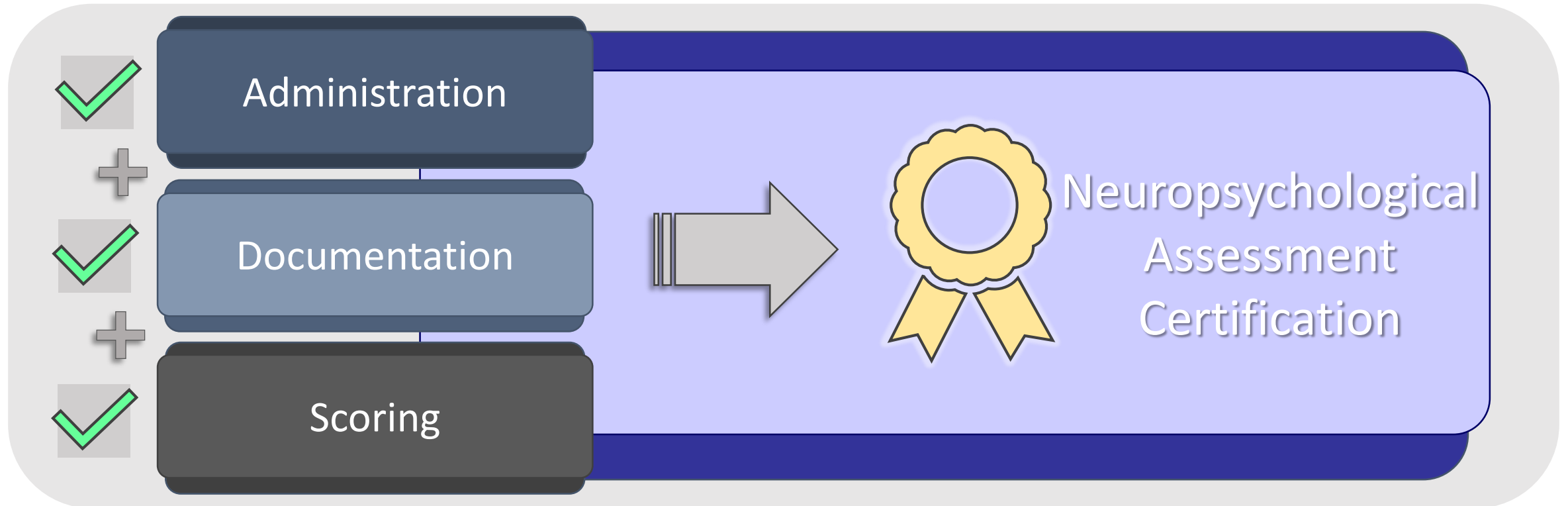
## Review

- To ensure proper understanding and execution, each component is reviewed and certified **independently**



# Procedural components Certification

- Comprehensive Neuropsychological Assessment Certification is accomplished once an examiner has been certified for **all 3 procedural components**



Neuropsychological Assessment Certification

# **Administration Certification**

Submission requirements

# Administration Certification Instruments

- The following **instruments** must be submitted for Administration Certification:

Instrument	Acronym
Medical Systems Validity Test	MSVT
Brief Visuospatial Memory Test-Revised	BVMT-R
Grooved Pegboard Test	GPB
Trail-Making Test	TMT
National Institutes of Health Toolbox Battery iPad measures	NIH Toolbox
Delis-Kaplan Executive Function System	D-KEFS
Wechsler Adult Intelligence Scale, Fourth Version	WAIS-IV
California Verbal Learning Test, Second Edition	CVLT-II

\* Note: the self-administered Traumatic Brain Injury-Quality of Life (TBI-QoL) questionnaires are not required for submission.



# Administration Certification Assessments

- The following **assessments** must be included for submission:

	Assessment	Acronym
MSVT	Immediate Recall Delayed Recall	
BVMT-R	Trials 1-3 Delayed Recall	
GPB	Dominant Hand Non-Dominant Hand	DH NDH
TMT	Test A Test B	A B
NIH Toolbox	Introduction Cognition measures <ul style="list-style-type: none"> <li>Picture Vocabulary Test</li> <li>Flanker Inhibitory Control and Attention Test</li> <li>List Sorting Working Memory Test</li> <li>Dimensional Change Card Sort</li> <li>Pattern Comparison Process Speed Test</li> <li>Picture Sequence Memory Test</li> </ul>	<ul style="list-style-type: none"> <li>PVT</li> <li>FICAT</li> <li>LSWMT</li> <li>DCCS</li> <li>PCPST</li> <li>PSMT</li> </ul>

	Assessment	Acronym
D-KEFS	Verbal Fluency Test <ul style="list-style-type: none"> <li>Condition 1: Letter Fluency</li> <li>Condition 2: Category Fluency</li> </ul>	<ul style="list-style-type: none"> <li>LF</li> <li>CF</li> </ul>
WAIS-IV	Digit Span <ul style="list-style-type: none"> <li>Forward condition</li> <li>Backward condition</li> <li>Sequencing condition</li> </ul> Letter-Number Sequencing Visual Puzzles Symbol Search Coding	DS <ul style="list-style-type: none"> <li>DSF</li> <li>DSB</li> <li>DSS</li> </ul> LN VP SS CD
CVLT-II	Immediate Recall Short-Delay Recall Long-Delay Recall Yes/No Recognition Forced-Choice Recognition	SD Recall LD Recall Y/N Recog. F-C Recog.

\* Note: NIH Toolbox Motor and Sensory measures are not required for submission.

# Administration Certification

## Battery structure

\* Note: grey text indicates assessments and measures not required for submission.

### Neuropsychological assessment, block 1

MSVT, Immediate Recall

BVMT-R, Trials 1-3

GPB, DH & NDH

TMT, A & B

WAIS-IV, DS

MSVT, Delayed Recall

D-KEFS, LF & CF

BVMT-R, Delayed Recall

### Assessment Center, iPad measures block

NIH Toolbox, Introduction & Cognition measures  
(Motor & Sensory measures)

(TBI-QoL questionnaires)

### Neuropsychological assessment, block 2

CVLT-II, Immediate & SD Recall

WAIS-IV, SS

WAIS-IV, VP

WAIS-IV, LN

CVLT-II, LD Recall & Y/N Recog.

WAIS-IV, CD

CVLT-II, F-C Recog.

# Administration Certification Submission requirements

## Administration film criteria

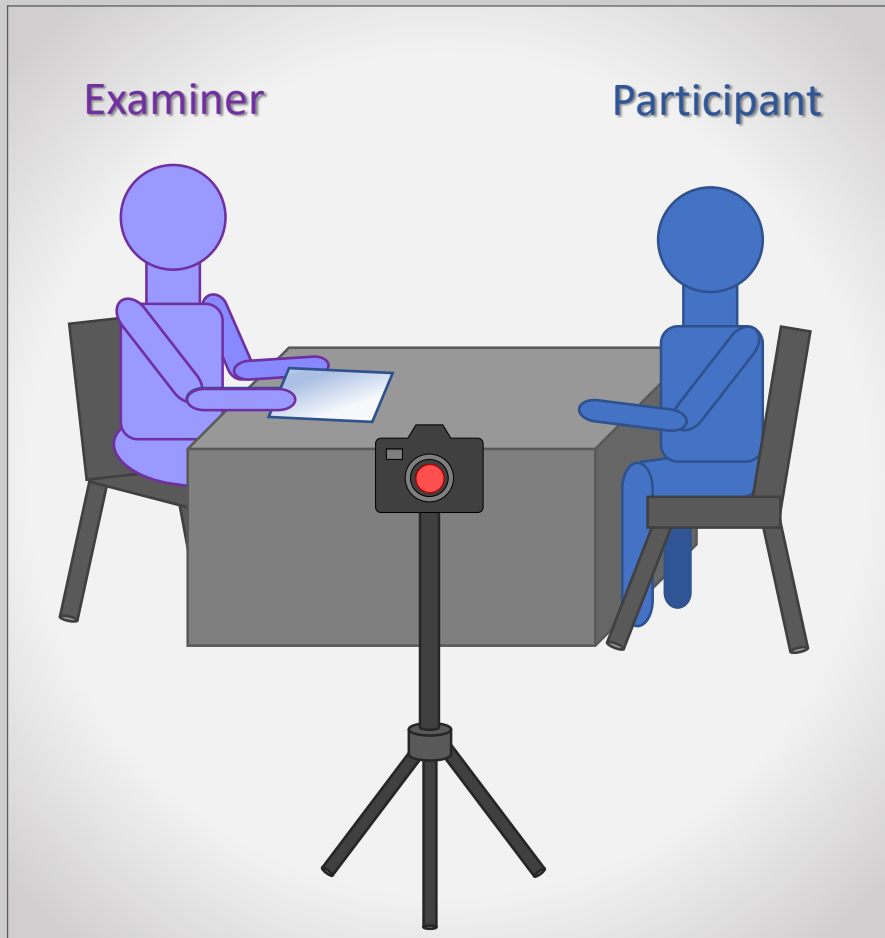
Ideally, the administration film should emulate a **real In-Person Visit** to the extent possible; therefore, administration of the entire battery should be recorded during a **single session**, according to the order typically employed during a standard In-Person Visit.

**All assessments** required for submission must be administered (reference: slides 9-10)

- **Procedure:** administration of each assessment must strictly adhere to the regulation specified by the respective manual
  - **Script:** all instructions and assessment items must be administered exactly according to script
  - **Tone:** all assessment items must be administered with an even, consistent tone, as well as abide by specified regulation
    - E.g., WAIS-IV, DS: digits must be read **with an even tone**, then **drop at the final digit** to indicate completion of digit string
  - **Timing:** administration of all assessment items must abide by respective timing regulation
    - E.g., CVLT-II: word list items must be read **clearly**, and **evenly paced**, at a rate of **slightly >1 second/word**; administration of the entire list must be complete within **18-20 seconds**
  - **Materials:** all materials required for administration must be properly employed and visible
    - E.g., stimuli, timer

# Administration Certification Submission requirements

## Filming



- **Examiner** and **participant** must be captured entirely, remaining viewable and within frame throughout the duration of assessment administration
  - **iPad measures:** for all measures administered by iPad, the recording device should be established behind the participant, at an angle which allows the reviewer to observe the iPad screen and examiner
- **Audio quality** and **volume** must be sufficient to confirm that the examiner correctly administered assessment instructions and items
- **Materials** required for administration must be clearly visible

Neuropsychological Assessment Certification

# Documentation Certification

Submission requirements

# Documentation Certification

## Source documentation

- **Record Forms** and **CRFs** must be submitted for Documentation Certification
- As source documentation requirements vary by assessment, the specific forms that must be provided for each instrument are indicated as follows:

Instrument	Submission Requirement			
		Record Form		CRF
MSVT		(not applicable)	✓	Required
BVMT-R	✓	Required		(not applicable)
GPB	✓	Optional	✓	Required
TMT	✓	Required	✓	Required
D-KEFS	✓	Required	✓	Required
WAIS-IV	✓	Required	✓	Required
CVLT-II	✓	Required	✓	Required

\* Note: source documentation is not required for assessments administered by iPad.

# Documentation Certification Procedure review

## Form completion

**Record Form:** each completed Record Form should serve as a detailed account of the events that occurred during assessment administration and data collection, as well as provide clear justification for credit assigned during scoring

- **Participant response:** all participant responses produced during data collection must be thoroughly and accurately reported
  - **Abbreviation:** responses abbreviated during assessment administration must be completed to finalize source documentation
- **Credit assignment:** explicit indication of credit assignment, as well as identification of incorrect responses
  - **Totals:** all fields provided for assessment, trial, and condition totals should be completed

**Case Report Form (CRF):** each required CRF must be completed entirely, reflecting a value for every variable presented

- **Absent value:** any instance of absent data must be accompanied by explanation of reasoning

# Documentation Certification Procedure review

## Essential information

**Battery identification:** the following details must be recorded upon each completed Record Form cover page and CRF

- **Participant ID**
- **Visit detail:**
  - Type (e.g., Baseline, Year-15 Comprehensive, etc.)
  - Date
- **Examiner initials**

**Demography:** for each assessment, the Record Form or CRF must reflect the specific **demographic information** that is **required for scoring** of the assessment, which may include 1 or multiple details from the options indicated as follows

- **Age**
- **Sex**
- **Race**
- **Education**



# Documentation Certification Procedure review

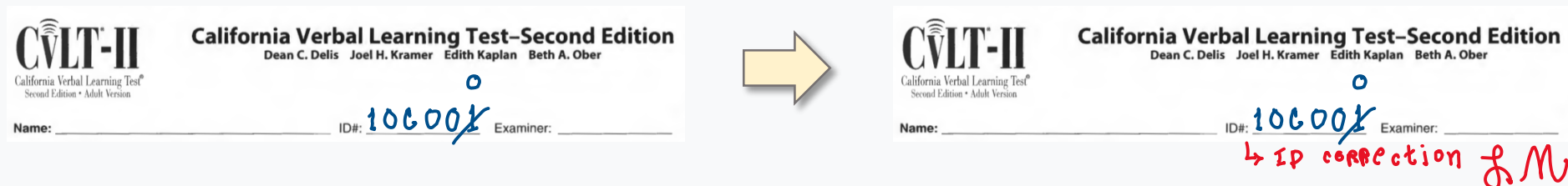
## Notation

**Extraneous marks:** any instance of extraneous marking resulting from revision or mistake must be accompanied by an **appropriate explanation** and **examiner initials**; common reasons for extraneous marking and proper notation are indicated as follows

- **Self-corrected response:**



- **Examiner mistake:**



**Irregular procedure:** any instance of irregular procedure must be reflected by the **source documentation** and **Reliability Code form**

# Documentation Certification Submission requirements

Instrument	Submission Requirement		
	Record Form		CRF
MSVT	(not applicable)	✓	Required
BVMT-R	✓	Required	(not applicable)
GPB	✓	Optional	Required
TMT	✓	Required	Required
D-KEFS	✓	Required	Required
WAIS-IV	✓	Required	Required
CVLT-II	✓	Required	Required

- Source documentation criteria for each assessment are specified by the NP Documentation Certification Report →
- While requirements vary by assessment, the following criteria must be satisfied for all instruments:
  - **Demography:** all demographic details specified must be recorded upon the assessment Record Form or CRF
  - **Examiner initials:** all Record Forms and CRFs must reflect the initials of the submitting examiner

Documentation procedure				
Assessment	Requirement			Commentary
BVMT-R	<b>Demography:</b> variables required for scoring			
	Age +	DOB	# months	
	<b>Examiner initials</b>			
	Notation: comments for abnormal marks, procedure			
GPB	<b>Demography:</b> variables required for scoring			
	Age	Race	Sex	Education
	<b>Examiner initials</b>			
	Time: recorded			
TMT	<b>Demography:</b> variables required for scoring			
	Age	Race	Sex	Education
	<b>Examiner initials</b>			
	Time: recorded			
D-KEFS	<b>Demography:</b> variables required for scoring			
	Age			
	<b>Examiner initials</b>			
	Responses: thoroughly documented			
WAIS-IV	<b>Demography:</b> variables required for scoring			
	Age			
	<b>Examiner initials</b>			
	Responses: thoroughly documented			
Digit Span	<b>Demography:</b> variables required for scoring			
	Age			
	<b>Examiner initials</b>			
	Responses: thoroughly documented			
Visual Puzzles	<b>Demography:</b> variables required for scoring			
	Age			
	<b>Examiner initials</b>			
	Responses: thoroughly documented			
Letter-Number Sequencing	<b>Demography:</b> variables required for scoring			
	Age			
	<b>Examiner initials</b>			
	Responses: thoroughly documented			
Symbol Search	<b>Demography:</b> variables required for scoring			
	Age			
	<b>Examiner initials</b>			
	Responses: thoroughly documented			
Coding	<b>Demography:</b> variables required for scoring			
	Age			
	<b>Examiner initials</b>			
	Responses: thoroughly documented			
CVLT-II	<b>Demography:</b> variables required for scoring			
	Age	Sex	Education	
	<b>Examiner initials</b>			
	Responses: thoroughly documented			

# Documentation Certification Submission requirements

## Demography

All required demographic details described by the following table must be presented by the assessment Record Form or CRF:

Instrument	Variable	Value description
BVMT-R	Age	# years
	DOB	mm/dd/yyyy (alternative: # months since recent birthday)
GPB, TMT	Age	# years
	Race	<input type="checkbox"/> Caucasian <input type="checkbox"/> African American
	Sex	<input type="checkbox"/> Male <input type="checkbox"/> Female
	Education	# years
D-KEFS	Age	# years
WAIS-IV	Age	# years
CVLT-II	Age	# years
	Sex	<input type="checkbox"/> Male <input type="checkbox"/> Female
	Education	# years

Documentation procedure			
Assessment	Requirement		Commentary
BVMT-R	Demography: variables required for scoring		
	Age +	DOB	# months
	Examiner initials		
	Notation: comments for abnormal marks, procedure		
GPB	Demography: variables required for scoring		
	Age	Race	Sex    Education
	Examiner initials		
	Time: recorded		
	Credit assignment: properly indicated		
Notation: comments for abnormal marks, procedure			
TMT	Demography: variables required for scoring		
	Age	Race	Sex    Education
	Examiner initials		
	Time: recorded		
	Credit assignment: properly indicated		
Notation: comments for abnormal marks, procedure			
D-KEFS	Demography: variables required for scoring		
	Age		
	Examiner initials		
	Responses: thoroughly documented		
Credit assignment: properly indicated			
Notation: comments for abnormal marks, procedure			
WAIS-IV	Demography: variables required for scoring		
	Age		
Digit Span	Examiner initials		
	Responses: thoroughly documented		
	Credit assignment: properly indicated		
Notation: comments for abnormal marks, procedure			
Visual Puzzles	Time: recorded		
	Responses: thoroughly documented		
	Credit assignment: properly indicated		
	Notation: comments for abnormal marks, procedure		
Letter-Number Sequencing	Responses: thoroughly documented		
	Credit assignment: properly indicated		
	Notation: comments for abnormal marks, procedure		
Symbol Search	Credit assignment: properly indicated		
	Notation: comments for abnormal marks, procedure		
Coding	Credit assignment: properly indicated		
	Notation: comments for abnormal marks, procedure		
CVLT-II	Demography: variables required for scoring		
	Age	Sex	Education
	Examiner initials		
	Responses: thoroughly documented		
	Credit assignment: properly indicated		
Notation: comments for abnormal marks, procedure			

# Documentation Certification Submission requirements

## Reminders

- **Responses:** all participant responses must be thoroughly documented
  - **Abbreviation:** any instance of response abbreviation must be corrected prior to submission
- **Credit assignment:**
  - **Response identification:** all incorrect responses must be clearly identified, including indication of error type, as applicable
  - **Scores:** all trial, item, and total scores must be appropriately indicated, according to assessment procedure
- **Time:** for assessments that incorporate completion time into scoring, time values must be precisely reported
- **Notation** (as applicable): any instance of extraneous marking must be accompanied by examiner initials, and explanation as necessary

Documentation procedure				
Assessment	Requirement			Commentary
BVMT-R	<b>Demography:</b> variables required for scoring			
	Age +	DOB	# months	
	<b>Examiner initials</b>			
	Notation: comments for abnormal marks, procedure			
GPB	<b>Demography:</b> variables required for scoring			
	Age	Race	Sex	Education
	<b>Examiner initials</b>			
	<b>Time:</b> recorded			
	<b>Credit assignment:</b> properly indicated			
Notation: comments for abnormal marks, procedure				
TMT	<b>Demography:</b> variables required for scoring			
	Age	Race	Sex	Education
	<b>Examiner initials</b>			
	<b>Time:</b> recorded			
	<b>Credit assignment:</b> properly indicated			
Notation: comments for abnormal marks, procedure				
D-KEFS	<b>Demography:</b> variables required for scoring			
	Age			
	<b>Examiner initials</b>			
	<b>Responses:</b> thoroughly documented			
<b>Credit assignment:</b> properly indicated				
Notation: comments for abnormal marks, procedure				
WAIS-IV	<b>Demography:</b> variables required for scoring			
	Age			
<b>Examiner initials</b>				
Digit Span	<b>Responses:</b> thoroughly documented			
<b>Credit assignment:</b> properly indicated				
Notation: comments for abnormal marks, procedure				
Visual Puzzles	<b>Time:</b> recorded			
<b>Responses:</b> thoroughly documented				
<b>Credit assignment:</b> properly indicated				
Notation: comments for abnormal marks, procedure				
Letter-Number Sequencing	<b>Responses:</b> thoroughly documented			
<b>Credit assignment:</b> properly indicated				
Notation: comments for abnormal marks, procedure				
Symbol Search	<b>Credit assignment:</b> properly indicated			
Notation: comments for abnormal marks, procedure				
Coding	<b>Credit assignment:</b> properly indicated			
Notation: comments for abnormal marks, procedure				
CVLT-II	<b>Demography:</b> variables required for scoring			
	Age	Sex	Education	
	<b>Examiner initials</b>			
	<b>Responses:</b> thoroughly documented			
<b>Credit assignment:</b> properly indicated				
Notation: comments for abnormal marks, procedure				

Neuropsychological Assessment Certification

# Scoring Certification

Submission requirements

# Scoring Certification

## Source documentation

- **Record Forms** and **CRFs** must be submitted for Scoring Certification
- As scoring requirements vary by assessment, the specific forms that must be provided for each instrument are indicated as follows:

Instrument	Submission Requirement			
		Record Form		CRF
GPB		Optional		Required
TMT		Required		Required
D-KEFS		Required		Required
WAIS-IV		Required		Required
CVLT-II		Required		Required

\* Note: Scoring Certification review is not conducted for the following assessments

- MSVT
- BVMT-R
- Assessments administered by iPad

# Scoring Certification Procedure review

## General recommendation

**Regulation:** review the instruction, procedure, and information provided by each assessment manual to ensure comprehensive understanding of assessment regulation

Common types of assessment regulation:

- **Correct response** versus **incorrect response**
  - Incorrect response types
- **Time limit**
- **Discontinue limit**
- **Raw score** and **normative score procedure**

**Secondary review:** following generation of scores, conduct secondary review to ensure data accuracy

# Scoring Certification Submission requirements

Instrument	Submission Requirement			
	Record Form	CRF	Record Form	CRF
GPB	✓	Optional	✓	Required
TMT	✓	Required	✓	Required
D-KEFS	✓	Required	✓	Required
WAIS-IV	✓	Required	✓	Required
CVLT-II	✓	Required	✓	Required

- Scoring procedure criteria for each assessment are specified by the NP Scoring Certification Report →
- While requirements vary by assessment, the following criteria must be satisfied for all instruments:
  - **Credit assignment:** all credit must be appropriately assigned, according to the correct and incorrect response regulations defined by the assessment manual
  - **Calculation:** all calculations must be accurate, and Raw score values must be recorded upon the Record Form and CRF
  - **Normative score retrieval:** all Normative score values must be retrieved according to procedure, and recorded upon the CRF

Scoring procedure		
Assessment	Requirement	Commentary
GPB	Credit assignment: according to procedure	
	Calculation: accurate	
	Normative score retrieval: according to procedure	
TMT	Credit assignment: according to procedure	
	Calculation: accurate	
	Normative score retrieval: according to procedure	
D-KEFS	Credit assignment: according to procedure	
	Correct response: identification, credit	
	Incorrect response: identification, credit	
	Calculation: accurate	
WAIS-IV	Credit assignment: according to procedure	
	Correct response: identification, credit	
	Incorrect response: identification, credit	
	Calculation: accurate	
Digit Span	Normative score retrieval: according to procedure	
	Credit assignment: according to procedure	
	Discontinue limit: 0 for 2 trials of 1 item	
	Calculation: accurate	
WAIS-IV	Credit assignment: according to procedure	
	Time limit: (#1-7) ≤20, (#8-26) ≤30 seconds	
	Correct response: identification, credit	
	Incorrect response: identification, credit	
Visual Puzzles	Calculation: accurate	
	Normative score retrieval: according to procedure	
	Discontinue limit: 0 for 3 consecutive items	
	Credit assignment: according to procedure	
WAIS-IV	Credit assignment: according to procedure	
	Correct response: identification, credit	
	Incorrect response: identification, credit	
	Calculation: accurate	
Letter-Number Sequencing	Normative score retrieval: according to procedure	
	Discontinue limit: 0 for 3 trials of 1 item	
	Credit assignment: according to procedure	
	Calculation: accurate	
WAIS-IV	Credit assignment: according to procedure	
	Correct response: identification, credit	
	Incorrect response: identification, credit	
Symbol Search	Calculation: accurate	
	Normative score retrieval: according to procedure	
	Credit assignment: according to procedure	
WAIS-IV	Credit assignment: according to procedure	
	Correct response: identification, credit	
	Incorrect response: identification, credit	
Coding	Calculation: accurate	
	Normative score retrieval: according to procedure	
	Credit assignment: according to procedure	
CVLT-II	Credit assignment: according to procedure	
	Correct response: identification, credit	
	Incorrect response: identification, credit	
	Calculation: accurate	
CVLT-II	Normative score retrieval: according to procedure	
	Calculation: accurate	



# Scoring Certification Submission requirements

## Reminders

- **Credit assignment:** ensure that all credit assignment, generated Raw scores, and obtained Normative scores are clearly justified by the responses and information provided by the source documentation
  - **Response identification:** all incorrect responses must be clearly identified, including indication of error type, as applicable
  - **Scores:** all trial, item, and total scores must be appropriately indicated, according to assessment procedure
- **Regulation:** following administration, carefully review the source documentation to verify that all data was collected according to procedure, as deviation may render consequences for scoring
  - **Discontinue limit:** ensure that the data and resulting scores reflect adherence to all specified Discontinue limits
  - **Time limit:** ensure that the data and resulting scores reflect adherence to all Time limit stipulations

Scoring procedure		
Assessment	Requirement	Commentary
GPB	Credit assignment: according to procedure	
	Calculation: accurate	
	Normative score retrieval: according to procedure	
TMT	Credit assignment: according to procedure	
	Calculation: accurate	
	Normative score retrieval: according to procedure	
D-KEFS	Credit assignment: according to procedure	
	Correct response: identification, credit	
	Incorrect response: identification, credit	
	Calculation: accurate	
WAIS-IV Digit Span	Normative score retrieval: according to procedure	
	Credit assignment: according to procedure	
	Correct response: identification, credit	
	Incorrect response: identification, credit	
	Calculation: accurate	
WAIS-IV Visual Puzzles	Normative score retrieval: according to procedure	
	Credit assignment: according to procedure	
	Time limit: (#1-7) ≤20, (#8-26) ≤30 seconds	
	Correct response: identification, credit	
	Incorrect response: identification, credit	
WAIS-IV Letter-Number Sequencing	Calculation: accurate	
	Normative score retrieval: according to procedure	
	Discontinue limit: 0 for 3 consecutive items	
	Credit assignment: according to procedure	
	Correct response: identification, credit	
WAIS-IV Symbol Search	Incorrect response: identification, credit	
	Calculation: accurate	
	Normative score retrieval: according to procedure	
	Credit assignment: according to procedure	
WAIS-IV Coding	Correct response: identification, credit	
	Incorrect response: identification, credit	
	Calculation: accurate	
	Normative score retrieval: according to procedure	
CVLT-II	Credit assignment: according to procedure	
	Correct response: identification, credit	
	Incorrect response: identification, credit	
	Calculation: accurate	
	Normative score retrieval: according to procedure	

# Neuropsychological Assessment Certification

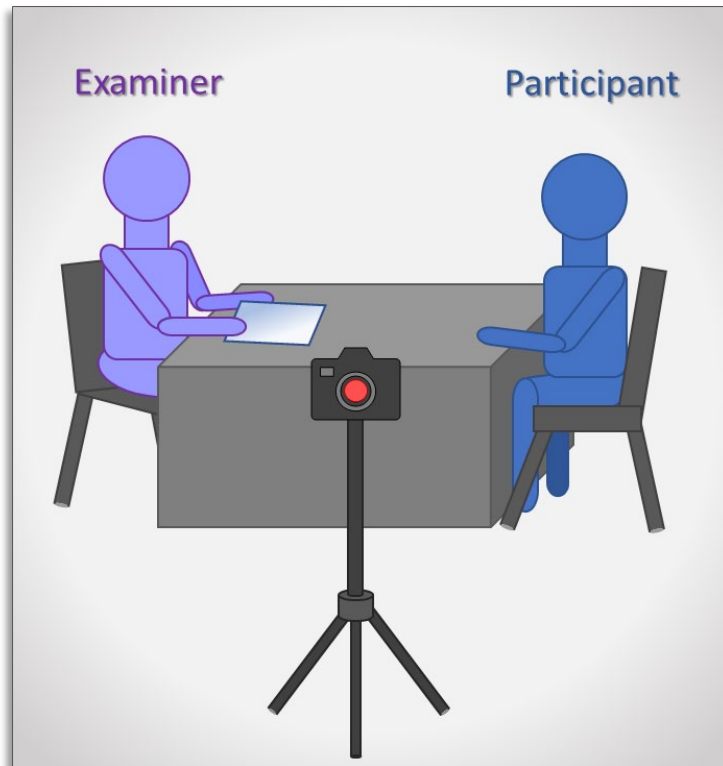
## **Submission**

Process, procedure, & information

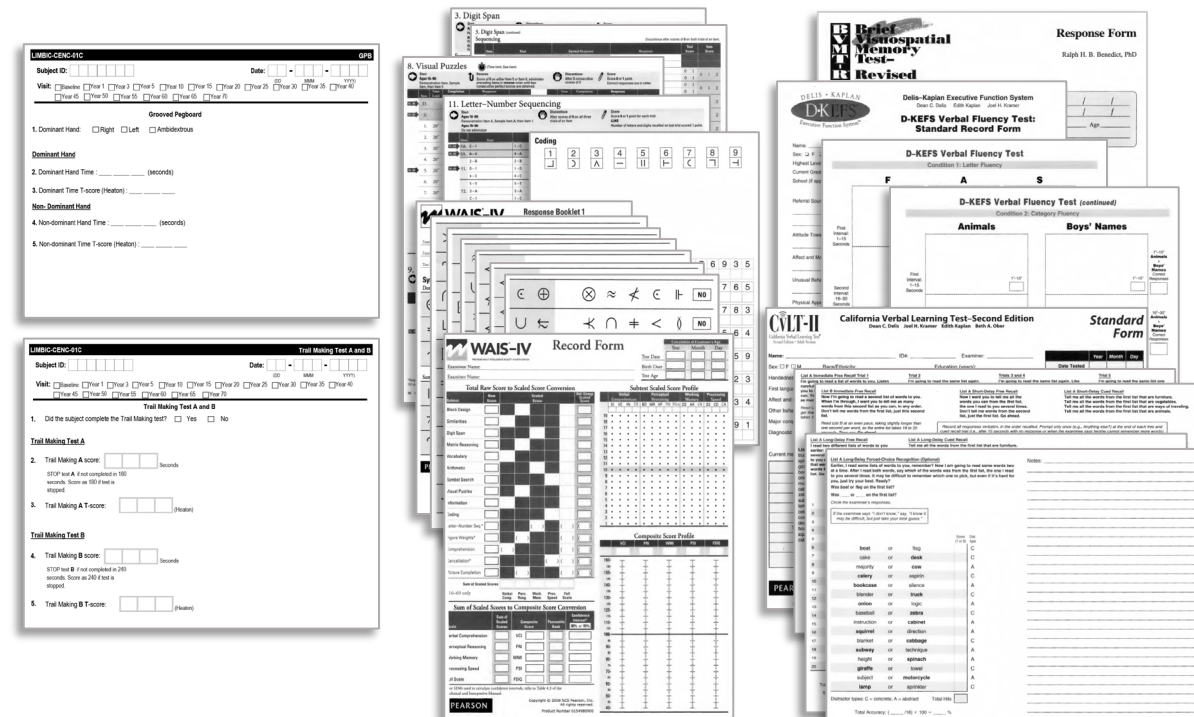
# Submission Process

Upon completion with administration filming and finalization of source documentation, all NP Certification material should be compressed into 1 ZIP file package, then submitted through the SFTP, according to the instructions provided as follows

## Administration



## Documentation & Scoring



# Submission Procedure

1. To facilitate the upload process, compress all NP Certification administration video files and finalized source documentation files into 1 ZIP file package. The NP Certification ZIP file package and all contents should be labeled according to the convention described as follows:

	<b>Convention</b>	<b>Sample</b>
<b>ZIP file package</b>	“NP-Cert_” + (first initial) + (last name)	<i>NP-Cert_JDoe</i>
Administration video		
<b>1 video file</b>	“NP-Cert.Admin_” + (first initial) + (last name)	<i>NP-Cert.Admin_JDoe</i>
<b>Multiple video files</b>	“NP-Cert.Admin_Assessment-” + (first initial) + (last name)	<i>NP-Cert.Admin_DKEFS-JDoe</i>
Source documentation		
<b>1 document file</b>	“NP-Cert.Doc_” + (first initial) + (last name)	<i>NP-Cert.Doc_JDoe</i>
<b>Multiple document files</b>	“NP-Cert.Doc_Assessment-” + (first initial) + (last name)	<i>NP-Cert.Doc_DKEFS-JDoe</i>

# Submission Procedure

2. Once all files have been compressed into the NP Certification ZIP file package and the submission is labeled appropriately, identify the size of the ZIP file package to determine the optimal browser for upload. Each browser tends to be restricted to a specific upload limitation, which may potentially impact the upload rate and dictate ultimate success. The following table indicates the respective file size upload maximum for common browsers:
3. Select a browser, then access the SFTP login portal (<https://sftp.limbic-cenc.org/>) and enter the appropriate SFTP login credentials:
  - a. Google Chrome and Mozilla Firefox have been advocated, and appear to yield the highest probability of successful upload

Browser	Version	Upload limitation
Internet Explorer	≤ 8	2 GB
Internet Explorer	9+	4 GB
Mozilla Firefox	(all versions)	~2-5 GB
Google Chrome	(all versions)	>4 GB
Opera	10	>4 GB

Download and installation page links:

- [Google Chrome download and installation](#) page
- [Mozilla Firefox download and installation](#) page

# Submission Procedure

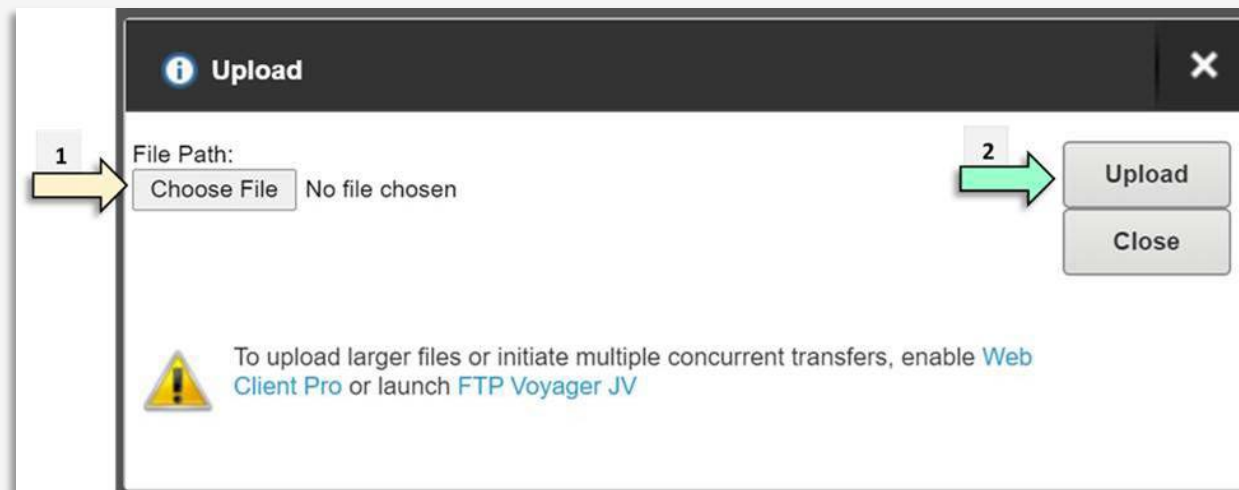
4. Upon login, a “Client Options” window will appear, requesting selection of the preferred application to employ for accessing the account: “**Web Client**”, or “**FTP Voyager JV**”. For nearly all browsers (exception: Internet Explorer, version  $\leq 8$ ), the standard “**Web Client**” will reliably accommodate upload of file sizes up to 4 GB, and may be successful for file sizes up to 5 GB; therefore, initially selecting “**Web Client**” and attempting upload is generally recommended.

(Note: potential solutions for resolving upload problems or failure are provided under the **Issues** section following #8).

5. Within the SFTP system, enter the appropriate Site folder and review the contents. Locate and enter the “Certification” folder.
6. Once within the appropriate destination folder, click the “Upload” icon to proceed with submission.

# Submission Procedure

7. The “Upload” window presented as follows will appear. Toward the left, select “Choose File” (1, →), then locate the NP Certification ZIP file package and click “Open”. Confirm that the NP Certification ZIP file package is indicated, then click the “Upload” icon (2, →) to complete submission.



# Submission Procedure

8. Upon successful upload of the NP Certification ZIP file package, disseminate a notification to the **NP Certification Reviewer**. Contact information is provided as follows:

a. **NP Documentation, Scoring, & Administration** Certification Reviewer:

Dr. Nancy Hsu

[nancy.hsu@vcuhealth.org](mailto:nancy.hsu@vcuhealth.org)



# Submission Issues

Should the ZIP file package fail to upload with the selected browser and standard “Web Client” application, potential solutions and information are provided as follows:

- Connection: ensure that internet and network connections are stable
  - Due to the commonly substantial size of video files, upload will probably require a significant amount of time and system resources (e.g., CPU, GPU, memory); therefore, even minor glitches could potentially render fatal interruptions that ultimately terminate upload
  - Exiting unnecessary applications and windows may enhance connection by increasing available processing power
- Browser: consider switching to a different browser
  - Google Chrome and Mozilla Firefox have been advocated, and appear to yield the highest probability of successful upload

Download and installation page links:

- [Google Chrome download and installation](#) page
- [Mozilla Firefox download and installation](#) page

# Submission Issues

- Application: while failure to upload is typically the result of connection or browser issues, the remaining possibility is that the size of the ZIP file package exceeds the capabilities of the standard “**Web Client**” application. As a primary purpose of the “**FTP Voyager JV**” application is to handle substantial file sizes, cases of upload failure specifically resulting from file size may be resolved by switching from the standard “**Web Client**” to “**FTP Voyager JV**”.
  - Once within the SFTP system, the option of Client switching is available for navigation between applications. Toward the top-right corner of the page, locate the “Jump to:” drop-down menu, and select “**FTP Voyager JV**”
  - \* Note: Please be aware that “**FTP Voyager JV**” requires Java (version 1.6+) download and installation. Should the device lack the proper Java software, selecting or switching to “**FTP Voyager JV**” will direct the browser to a Java download and installation page. To utilize the application, complete the Java download and installation page according to the instructions provided by the page.
    - Once Java (version 1.6+) is downloaded and installed, attempt upload according to the procedure indicated under **Submission**, #5-8.