## Quick Aphasia Battery (QAB)

## Form 1

Participant $\qquad$ Date $\qquad$ Time $\qquad$
Location
Examiner

- Allow 6 seconds to respond to each item. Correct responses after 3 seconds count as delayed and receive 3 points. Score only material produced in the first 6 seconds, except where a response is initiated before 6 seconds, and then continues.
- Score the first complete response (i.e. not a false start, nor a fragment).
- Verbally presented items may be repeated once, if the patient requests, or if the examiner suspects mishearing or a lapse in attention. If an item is repeated, restart the 6 second count.
- Dysarthric or apraxic errors not affecting the identity of any phonemes should be ignored, except when rating motor speech.


## 1. Level of consciousness

Can be approached? Score as follows: $4=$ yes; $0=$ no, based on prior discussion with nurse(s), doctor(s), etc.
(a) Is patient sufficiently clinically stable to be approached?
[0 (stop)] [4]
Can be roused? Score as follows: 4 = already awake or rouses to mild stimulation; 3 = rouses to moderate stimulation; $2=$ rouses, but does not stay awake; 1 = shows some response but does not rouse; $0=$ no response.
(b) Can patient be roused?
[0 (stop)] [1 (stop)] [2] [3] [4]
Oriented? Score as follows: 4 = an intelligible, correct answer (any speech/language errors may be ignored here); 3 = correct answers to all three yes/no questions; 2 = correct on 'yes' question and correct on $1 / 2$ 'no' questions; $1=$ equivocal signs of understanding and attempting to respond; $0=$ response shows no sign of understanding the question, or no response.
(c) Can you tell me where we are right now?
[0] [1] [2] [3] [4]
If NR/incorrect: Are we in a library?
Are we at a playground?
Are we at [correct place]? [yes] [no] [NR] [yes] [no] [NR]
(d) What month is it?

If NR/incorrect: Is it [wrong month]? Is it [wrong month]? Is it [correct month]?
[yes] [no] [NR] [yes] [no] [NR] [yes] [no] [NR]
(e) How old are you? $\qquad$ [0] [1] [2] [3] [4]

| If $N R /$ incorrect: | Are you [wrong age]? | [yes] [no] [NR] |
| :--- | :--- | :--- |
|  | Are you [correct age]? | [yes] [no] [NR] |
|  | Are you [wrong age]? | [yes] [no] [NR] |

[0] [1] [2] [3] [4]

Can follow commands? Score as follows: 4 = follows verbal command; 3 = imitates action; 1 = equivocal attempt to follow verbal command or imitate action; $0=$ response shows no sign of understanding the command, or no response. Alternative simple commands may be substituted if situational or patient factors dictate, in which case they should be noted.
(f) Close your eyes.

If not done: Model closing eyes, indicate to copy.
[0] [1] [3] [4]
(g) Squeeze my hand.

If not done: Squeeze patient's hand, indicate to copy.
[0] [1] [3] [4]
Overall impression. Score as follows: $4=$ yes; $3=y e s$, with reservations (e.g. some lapses); $2=$ on and off; $1=$ marginally; $0=$ not at all.
(h) Can patient stay awake, maintain attention, and attempt commands?

## 2. Connected speech

Converse with the participant for at least three minutes, around one or more conversation topics, e.g.:

- the best trip you ever took
- your favorite holiday as a child
- your worst childhood memory
- when you retired
- the worst trip you ever took
- a happy childhood memory
- when you had your first child
- what you like about where you live
- when you got married
- your first job
- how you met your husband/wife/partner
- a time you were really scared/embarrassed/angry

Present stimulus card 1. Ask 'What is happening here?'
(a) The boy is pushing the girl.
(b) The girl is chasing the boy.

Rate connected speech using the following scales. Other connected speech produced in the evaluation should also be considered. $4=$ normal: not present or within normal range; $3=$ mild: detectable but infrequent; $2=$ moderate: frequent but not pervasive; $1=$ marked: pervasive but not ubiquitous; $0=$ severe: evident in most or all utterances.

| Aphasic connected speech feature | 0 | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Reduced length and complexity of utterances | single words | MLU 2 words | MLU 3-4 words | MLU 5-7 words | normal |
| Reduced speech rate | 0-24 wpm | 25-49 wpm | 50-74 wpm | 75-99 wpm | 100+ wpm |
| Agrammatism: omission of words and morphemes, especially closed class; "telegraphic speech" | severe | marked | moderate | mild | normal |
| Paragrammatism: substitution of closed class items; inappropriate juxtaposition of words and phrases; garbled syntax | severe | marked | moderate | mild | normal |
| Anomia: word-finding pauses, word-finding failures, abandoned utterances, effective circumlocution | severe | marked | moderate | mild | normal |
| Empty speech: vague words, overabundance of closed class words, ineffective circumlocution, utterances unclear in meaning and/or tangential | severe | marked | moderate | mild | normal |
| Semantic paraphasias: substitution of open class items (including perseverations) | severe | marked | moderate | mild | normal |
| Phonemic paraphasias and neologisms | severe | marked | moderate | mild | normal |
| Self-correction: false starts, retraced sequences, conduite d'approche | severe | marked | moderate | mild | normal |
| Overall communication impairment | communication fragmentary; examiner carries burden | communication limited; participant shares burden | can discuss everyday topics; limited beyond that | impairment evident, but can discuss all topics | no impairment evident |

If not possible: [ ] No spontaneous speech [ ] Only incomprehensible muttering [ ] Only stereotypies [ ] Fewer than 10 wpm, typically mainly 'yes', 'no', a few single words or attempts

## 3. Word comprehension

Present stimulus card 2. Say 'Show me the...' Score as follows: 4 = correct; 3 = correct, but delayed $>3$ seconds, self-corrected, or repeated; $1=$ related foil; $0=$ unrelated foil, or no response within 6 seconds.

| (a) lion | Related: giraffe, horse |  | [0] [1] [3] [4] |
| :--- | :--- | :--- | :--- |
| (b) drum | Related: violin, trombone | $\ldots$ | [0] [1] [3] [4] |
| (c) violin | Related: drum, trombone | $\ldots$ | [0][1] [3] [4] |
| (d) giraffe | Related: lion, horse |  | [0][1][3][4] |

Present stimulus card 3.

| (e) bone | Related: boat |  | [0] [1] [3] [4] |
| :--- | :--- | :--- | :--- |
| (f) kite | Related: coat |  |  |
| (g) boot | Related: boat |  | [0] [1] [3] [4] |
| (h) goat | Related: coat |  | [0] [1] [3] [4] |
|  |  |  | $[0][1][3][4]$ |

## 4. Sentence comprehension

Say 'Answer yes or no...' Score as follows: 4 = correct. Nodding and shaking the head, other contextually appropriate alternatives to yes/no, e.g. 'sometimes', I don't think so', or idiosyncratic responses that demonstrate understanding are acceptable; 3 = correct, but delayed $>3$ seconds, self-corrected, or repeated; $2=$ idiosyncratic response where it is unclear whether or not patient understands; $1=$ incorrect, but response suggests some partial comprehension; $0=$ incorrect/no response within 6 seconds.
(a) Are you a [man/woman]? (Y) $\qquad$ [0] [1] [2] [3] [4]
(b) Am I a [man/woman]? (N) $\qquad$ [0] [1] [2] [3] [4]
(c) Do you cut the grass with an axe? (N) $\qquad$ [0] [1] [2] [3] [4]
(d) Are babies watched by babysitters? (Y) $\qquad$ [0] [1] [2] [3] [4]
(e) Do you open your door with a key? (Y) $\qquad$ [0] [1] [2] [3] [4]
(f) If you're about to leave, have you left yet? (N) $\qquad$ [0] [1] [2] [3] [4]
(g) Are witnesses questioned by police? ( $\mathbf{Y}$ ) $\qquad$ [0] [1] [2] [3] [4]
(h) If I tell you I used to smoke, do you think I smoke now? (N) $\qquad$ [0] [1] [2] [3] [4]
(i) Are doctors treated by patients? (N) [0] [1] [2] [3] [4]
(j) If I was at the park when you arrived, did I get there first? (Y) $\qquad$ [0] [1] [2] [3] [4]
(k) If you're about to go upstairs, are you still downstairs ( $\mathbf{Y}$ ) $\qquad$ [0] [1] [2] [3] [4]
(I) Are cats chased by mice? (N)

## 5. Picture naming

Present stimulus card 5. Ask 'What is this? And this? etc.' Score as follows: 4 = correct. Accept reasonable alternative labels; 3 = correct, but delayed >3 seconds or self-corrected; $2=$ at least half of the phonemes are correct, or apraxic error on target; $1=$ some relation to target; $0=$ unrelated response, or no response within 6 seconds.

| (a) $\operatorname{dog}$ | [0] [1] [2] [3] [4] |
| :---: | :---: |
| (b) pencil | [0] [1] [2] [3] [4] |
| (c) wheelchair | [0] [1] [2] [3] [4] |
| (d) octopus | [0] [1] [2] [3] [4] |
| (e) hammock | [0] [1] [2] [3] [4] |
| (f) escalator | [0] [1] [2] [3] [4] |

## 6. Repetition

Say 'Repeat after me.' Score as follows: 4 = correct. Expanding contraction in (f) is acceptable; 3 = correct, but delayed >3 seconds, selfcorrected, or repeated; $2=(a-d)$ at least half of the phonemes are correct, or apraxic error on target; (e-f) at least half of the words are correct; 1 = some relation to target, $2+$ words for (e) and (f); $0=$ unrelated response, or no response within 6 seconds.
(a) house
(b) breakfast
(c) catastrophe
(d) undetectable
[0] [1] [2] [3] [4]
(e) The sun rises in the East.
(f) The ambitious journalist discovered where we'd be going.

## 7. Reading aloud

Present stimulus card 6. Say 'Read these words and sentences out loud.' Score as follows: 4 = correct. Expanding contraction in (f) is acceptable; $3=$ correct, but delayed $>3$ seconds, self-corrected, or repeated; $2=(a-d)$ at least half of the phonemes are correct, or apraxic error on target; (e-f) at least half of the words are correct; $1=$ some relation to target, $2+$ words for (e) and (f); $0=$ unrelated response, or no response within 6 seconds.

| (a) tin |  | [0] [1] [2] [3] [4] |
| :--- | :--- | :--- |
| (b) dough |  | [0] [1] [2] [3] [4] |
| (c) proposition |  | [0] [1] [2] [3] [4] |
| (d) inexperienced | [0] [1] [2] [3] [4] |  |
| (e) The baby cries in the night. |  | [0] [1] [2] [3] [4] |
| (f) The popular novelist realized why l'd been calling. | [0] [1] [2] [3] [4] |  |

## 8. Motor speech

Ask patient to perform tasks (a), (c) and (d) as quickly as possible. Ask them to hold vowel in (b) as long as possible, up to 15 seconds. Counting can be done at normal rate. If motor speech deficits are suspected, additional items may be given (e.g. pursing and retracting lips, $t_{\wedge} t_{\wedge} t_{\Lambda}, k_{\wedge} k_{\wedge} k_{\wedge}$, catastrophe catastrophe catastrophe, sustained s ).
(a) tongue from side to side
(b) aaaaaah (voice quality)
(c) $\mathrm{p}_{\wedge} \mathrm{p}_{\wedge} \mathrm{p}_{\wedge} \mathrm{p}_{\wedge} \mathrm{p}_{\wedge}$ (rate/rhythm)
(d) $p_{\Lambda} t_{\Lambda} k_{\Lambda} p_{\Lambda} t_{\Lambda} k_{\Lambda} p_{\wedge} t_{\Lambda} k_{\Lambda}$ (rate/rhythm)
(e) Count to 10.

Rate motor speech using the following scales, based on the whole evaluation, not just this section.

| Motor speech feature | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Dysarthria: impairment of muscles used for speech <br> production | severe | marked | moderate | mild | normal |
| Apraxia of speech: impairment of speech motor <br> planning | severe | marked | moderate | mild | normal |

## Summary

Word comprehension

## Sentence comprehension

Word finding
Grammatical construction
Speech motor programming
Repetition
Reading
QAB overall

## Notes

## Quick Aphasia Battery (QAB)

## Form 2

Participant $\qquad$ Date $\qquad$ Time $\qquad$
Location
Examiner

- Allow 6 seconds to respond to each item. Correct responses after 3 seconds count as delayed and receive 3 points. Score only material produced in the first 6 seconds, except where a response is initiated before 6 seconds, and then continues.
- Score the first complete response (i.e. not a false start, nor a fragment).
- Verbally presented items may be repeated once, if the patient requests, or if the examiner suspects mishearing or a lapse in attention. If an item is repeated, restart the 6 second count.
- Dysarthric or apraxic errors not affecting the identity of any phonemes should be ignored, except when rating motor speech.


## 1. Level of consciousness

Can be approached? Score as follows: $4=y e s ; 0=$ no, based on prior discussion with nurse(s), doctor(s), etc.
(a) Is patient sufficiently clinically stable to be approached?
[0 (stop)] [4]
Can be roused? Score as follows: 4 = already awake or rouses to mild stimulation; 3 = rouses to moderate stimulation; $2=$ rouses, but does not stay awake; 1 = shows some response but does not rouse; $0=$ no response.
(b) Can patient be roused?
[0 (stop)] [1 (stop)] [2] [3] [4]
Oriented? Score as follows: 4 = an intelligible, correct answer (any speech/language errors may be ignored here); 3 = correct answers to all three yes/no questions; 2 = correct on 'yes' question and correct on $1 / 2$ 'no' questions; $1=$ equivocal signs of understanding and attempting to respond; $0=$ response shows no sign of understanding the question, or no response.
(c) Can you tell me where we are right now?
[0] [1] [2] [3] [4]
If NR/incorrect: Are we in a library?
Are we at a playground?
Are we at [correct place]? [yes] [no] [NR] [yes] [no] [NR]
(d) What month is it?

If NR/incorrect: Is it [wrong month]? Is it [wrong month]? Is it [correct month]?
[yes] [no] [NR] [yes] [no] [NR] [yes] [no] [NR]
(e) How old are you? $\qquad$ [0] [1] [2] [3] [4]

| If $N R /$ incorrect: | Are you [wrong age]? | [yes] [no] [NR] |
| :--- | :--- | :--- |
|  | Are you [correct age]? | [yes] [no] [NR] |
|  | Are you [wrong age]? | [yes] [no] [NR] |

[0] [1] [2] [3] [4]

Can follow commands? Score as follows: 4 = follows verbal command; 3 = imitates action; 1 = equivocal attempt to follow verbal command or imitate action; $0=$ response shows no sign of understanding the command, or no response. Alternative simple commands may be substituted if situational or patient factors dictate, in which case they should be noted.
(f) Close your eyes.

If not done: Model closing eyes, indicate to copy.
[0] [1] [3] [4]
(g) Squeeze my hand.

If not done: Squeeze patient's hand, indicate to copy.
[0] [1] [3] [4]
Overall impression. Score as follows: $4=$ yes; $3=y e s$, with reservations (e.g. some lapses); $2=$ on and off; $1=$ marginally; $0=$ not at all.
(h) Can patient stay awake, maintain attention, and attempt commands?

## 2. Connected speech

Converse with the participant for at least three minutes, around one or more conversation topics, e.g.:

- the best trip you ever took
- your favorite holiday as a child
- your worst childhood memory
- when you retired
- the worst trip you ever took
- a happy childhood memory
- when you had your first child
- what you like about where you live
- when you got married
- your first job
- how you met your husband/wife/partner
- a time you were really scared/embarrassed/angry

Present stimulus card 1. Ask 'What is happening here?'
(a) The boy is washing the girl.
(b) The girl is kicking the boy.

Rate connected speech using the following scales. Other connected speech produced in the evaluation should also be considered. $4=$ normal: not present or within normal range; $3=$ mild: detectable but infrequent; $2=$ moderate: frequent but not pervasive; $1=$ marked: pervasive but not ubiquitous; $0=$ severe: evident in most or all utterances.

| Aphasic connected speech feature | 0 | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Reduced length and complexity of utterances | single words | MLU 2 words | MLU 3-4 words | MLU 5-7 words | normal |
| Reduced speech rate | 0-24 wpm | 25-49 wpm | 50-74 wpm | 75-99 wpm | 100+ wpm |
| Agrammatism: omission of words and morphemes, especially closed class; "telegraphic speech" | severe | marked | moderate | mild | normal |
| Paragrammatism: substitution of closed class items; inappropriate juxtaposition of words and phrases; garbled syntax | severe | marked | moderate | mild | normal |
| Anomia: word-finding pauses, word-finding failures, abandoned utterances, effective circumlocution | severe | marked | moderate | mild | normal |
| Empty speech: vague words, overabundance of closed class words, ineffective circumlocution, utterances unclear in meaning and/or tangential | severe | marked | moderate | mild | normal |
| Semantic paraphasias: substitution of open class items (including perseverations) | severe | marked | moderate | mild | normal |
| Phonemic paraphasias and neologisms | severe | marked | moderate | mild | normal |
| Self-correction: false starts, retraced sequences, conduite d'approche | severe | marked | moderate | mild | normal |
| Overall communication impairment | communication fragmentary; examiner carries burden | communication limited; participant shares burden | can discuss everyday topics; limited beyond that | impairment evident, but can discuss all topics | no impairment evident |

If not possible: [ ] No spontaneous speech [ ] Only incomprehensible muttering [ ] Only stereotypies [ ] Fewer than 10 wpm, typically mainly 'yes', 'no', a few single words or attempts

## 3. Word comprehension

Present stimulus card 2. Say 'Show me the...' Score as follows: 4 = correct; 3 = correct, but delayed $>3$ seconds, self-corrected, or repeated; $1=$ related foil; $0=$ unrelated foil, or no response within 6 seconds.

| (a) guitar | Related: saxophone, harp |  | [0] [1] [3] [4] |
| :--- | :--- | :--- | :--- |
| (b) tiger | Related: zebra, donkey |  |  |
| Related: tiger, donkey |  | [0] [1] [3] [4] |  |
| (c) zebra |  |  | [0] [1] [3] [4] |
| (d) saxophone | Related: guitar, harp |  | [0] [1] [3] [4] |

Present stimulus card 3.

| (e) pear | Related: chair, hair |  | [0] [1] [3] [4] |
| :--- | :--- | :--- | :--- |
| (f) crown | Related: clown |  |  |
| (g) cloud | Related: clown |  | [0] [1] [3] [4] |
| (h) chair | Related: pear, hair |  | [0] [1] [3] [4] |
|  |  | $[0][1][3][4]$ |  |

## 4. Sentence comprehension

Say 'Answer yes or no...' Score as follows: 4 = correct. Nodding and shaking the head, other contextually appropriate alternatives to yes/no, e.g. 'sometimes', ‘I don't think so', or idiosyncratic responses that demonstrate understanding are acceptable; $3=$ correct, but delayed >3 seconds, self-corrected, or repeated; 2 = idiosyncratic response where it is unclear whether or not patient understands; $1=$ incorrect, but response suggests some partial comprehension; $0=$ incorrect/no response within 6 seconds.
(a) Are you [sitting/lying down/etc.]? (Y) $\qquad$ [0] [1] [2] [3] [4]
(b) Am I [sitting/standing/etc.]? (N) [0] [1] [2] [3] [4]
(c) Do you eat ice cream with a spoon? (Y) $\qquad$ [0] [1] [2] [3] [4]
(d) Are spiders bitten by people? (N) $\qquad$ [0] [1] [2] [3] [4]
(e) Do you wear gloves on your feet? (N) $\qquad$ [0] [1] [2] [3] [4]
(f) If you're about to go outside, are you still inside? (Y) $\qquad$ [0] [1] [2] [3] [4]
(g) Are worms eaten by birds? (Y) $\qquad$ [0] [1] [2] [3] [4]
(h) If I tell you I used to exercise, do you think I exercise now? (N) [0] [1] [2] [3] [4]
(i) Are babies delivered by doctors? ( $\mathbf{Y}$ ) [0] [1] [2] [3] [4]
(j) If you're about to start, have you started yet? (N) $\qquad$ [0] [1] [2] [3] [4]
(k) Are parents raised by children? (N) $\qquad$
(I) If you were at the party when I arrived, did you get there first? (Y)

## 5. Picture naming

Present stimulus card 5. Ask 'What is this? And this? etc.' Score as follows: 4 = correct. Accept reasonable alternative labels; 3 = correct, but delayed >3 seconds or self-corrected; $2=$ at least half of the phonemes are correct, or apraxic error on target; $1=$ some relation to target; $0=$ unrelated response, or no response within 6 seconds.

| (a) book |  | [0] [1] [2] [3] [4] |
| :--- | :--- | :--- |
| (b) comb |  | [0] [1] [2] [3] [4] |
| (c) mask |  | [0] [1] [2] [3] [4] |
| (d) volcano |  | [0] [1] [2] [3] [4] |
| (e) seahorse |  | [0] [1] [2] [3] [4] |
| (f) pyramid |  | [0] [1] [2] [3] [4] |

## 6. Repetition

Say 'Repeat after me.' Score as follows: $4=$ correct. Expanding contraction in (f) is acceptable; 3 = correct, but delayed $>3$ seconds, selfcorrected, or repeated; $2=(\mathrm{a}-\mathrm{d})$ at least half of the phonemes are correct, or apraxic error on target; (e-f) at least half of the words are correct; 1 = some relation to target, $2+$ words for (e) and (f); $0=$ unrelated response, or no response within 6 seconds.
(a) man
(b) blanket $\qquad$ [0] [1] [2] [3] [4]
(c) prosperity $\qquad$ [0] [1] [2] [3] [4]
(d) insignificant $\qquad$ [0] [1] [2] [3] [4]
(e) The dog barks at the door.
(f) The creative architect understood who we'd be seeing.

## 7. Reading aloud

Present stimulus card 6. Say 'Read these words and sentences out loud.' Score as follows: 4 = correct. Expanding contraction in (f) is acceptable; $3=$ correct, but delayed $>3$ seconds, self-corrected, or repeated; $2=(a-d)$ at least half of the phonemes are correct, or apraxic error on target; (e-f) at least half of the words are correct; $1=$ some relation to target, $2+$ words for (e) and (f); $0=$ unrelated response, or no response within 6 seconds.
(a) pig
[0] [1] [2] [3] [4]
(b) choir
[0] [1] [2] [3] [4]
(c) graduation
[0] [1] [2] [3] [4]
(d) involuntary
[0] [1] [2] [3] [4]
(e) The sun sets in the West.
[0] [1] [2] [3] [4]
(f) The capable detective discovered why I'd been waiting.
[0] [1] [2] [3] [4]

## 8. Motor speech

Ask patient to perform tasks (a), (c) and (d) as quickly as possible. Ask them to hold vowel in (b) as long as possible, up to 15 seconds. Counting can be done at normal rate. If motor speech deficits are suspected, additional items may be given (e.g. pursing and retracting lips, $t_{\wedge} t_{\wedge} t_{\Lambda}, k_{\wedge} k_{\wedge} k_{\wedge}$, catastrophe catastrophe catastrophe, sustained s ).
(a) tongue from side to side
(b) aaaaaah (voice quality)
(c) $p \wedge p_{\wedge} p_{\wedge} p_{\wedge} p_{\wedge}$ (rate/rhythm)
(d) $p_{\Lambda} t_{\Lambda} k_{\Lambda} p_{\Lambda} t_{\Lambda} k_{\Lambda} p_{\wedge} t_{\Lambda} k_{\Lambda}$ (rate/rhythm)
(e) Count to 10 .

Rate motor speech using the following scales, based on the whole evaluation, not just this section.

| Motor speech feature | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Dysarthria: impairment of muscles used for speech <br> production | severe | marked | moderate | mild | normal |
| Apraxia of speech: impairment of speech motor <br> planning | severe | marked | moderate | mild | normal |

## Summary

Word comprehension

## Sentence comprehension

Word finding
Grammatical construction
Speech motor programming
Repetition
Reading
QAB overall

## Notes

## Quick Aphasia Battery (QAB)

## Form 3

## Participant

$\qquad$ Date $\qquad$ Time $\qquad$
Location
Examiner

- Allow 6 seconds to respond to each item. Correct responses after 3 seconds count as delayed and receive 3 points. Score only material produced in the first 6 seconds, except where a response is initiated before 6 seconds, and then continues.
- Score the first complete response (i.e. not a false start, nor a fragment).
- Verbally presented items may be repeated once, if the patient requests, or if the examiner suspects mishearing or a lapse in attention. If an item is repeated, restart the 6 second count.
- Dysarthric or apraxic errors not affecting the identity of any phonemes should be ignored, except when rating motor speech.


## 1. Level of consciousness

Can be approached? Score as follows: $4=$ yes; $0=$ no, based on prior discussion with nurse(s), doctor(s), etc.
(a) Is patient sufficiently clinically stable to be approached?
[0 (stop)] [4]
Can be roused? Score as follows: 4 = already awake or rouses to mild stimulation; 3 = rouses to moderate stimulation; $2=$ rouses, but does not stay awake; 1 = shows some response but does not rouse; $0=$ no response.
(b) Can patient be roused?
[0 (stop)] [1 (stop)] [2] [3] [4]
Oriented? Score as follows: 4 = an intelligible, correct answer (any speech/language errors may be ignored here); 3 = correct answers to all three yes/no questions; 2 = correct on 'yes' question and correct on $1 / 2$ 'no' questions; $1=$ equivocal signs of understanding and attempting to respond; $0=$ response shows no sign of understanding the question, or no response.
(c) Can you tell me where we are right now?
[0] [1] [2] [3] [4]
If NR/incorrect: Are we in a library?
Are we at a playground?
Are we at [correct place]? [yes] [no] [NR] [yes] [no] [NR]
(d) What month is it?

If NR/incorrect: Is it [wrong month]? Is it [wrong month]? Is it [correct month]?
[yes] [no] [NR] [yes] [no] [NR] [yes] [no] [NR]
(e) How old are you? $\qquad$ [0] [1] [2] [3] [4]

| If $N R /$ incorrect: | Are you [wrong age]? | [yes] [no] [NR] |
| :--- | :--- | :--- |
|  | Are you [correct age]? | [yes] [no] [NR] |
|  | Are you [wrong age]? | [yes] [no] [NR] |

[0] [1] [2] [3] [4]

Can follow commands? Score as follows: 4 = follows verbal command; 3 = imitates action; 1 = equivocal attempt to follow verbal command or imitate action; $0=$ response shows no sign of understanding the command, or no response. Alternative simple commands may be substituted if situational or patient factors dictate, in which case they should be noted.
(f) Close your eyes.

If not done: Model closing eyes, indicate to copy.
[0] [1] [3] [4]
(g) Squeeze my hand.

If not done: Squeeze patient's hand, indicate to copy.
[0] [1] [3] [4]
Overall impression. Score as follows: $4=$ yes; $3=y e s$, with reservations (e.g. some lapses); $2=$ on and off; $1=$ marginally; $0=$ not at all.
(h) Can patient stay awake, maintain attention, and attempt commands?

## 2. Connected speech

Converse with the participant for at least three minutes, around one or more conversation topics, e.g.:

- the best trip you ever took
- your favorite holiday as a child
- your worst childhood memory
- when you retired
- the worst trip you ever took
- a happy childhood memory
- when you had your first child
- what you like about where you live
- when you got married
- your first job
- how you met your husband/wife/partner
- a time you were really scared/embarrassed/angry

Present stimulus card 1. Ask 'What is happening here?'
(a) The girl is pulling the boy.
(b) The boy is kissing the girl.

Rate connected speech using the following scales. Other connected speech produced in the evaluation should also be considered. $4=$ normal: not present or within normal range; $3=$ mild: detectable but infrequent; $2=$ moderate: frequent but not pervasive; $1=$ marked: pervasive but not ubiquitous; $0=$ severe: evident in most or all utterances.

| Aphasic connected speech feature | 0 | 1 | 2 | 3 | 4 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Reduced length and complexity of utterances | single words | MLU 2 words | MLU 3-4 words | MLU 5-7 words | normal |
| Reduced speech rate | 0-24 wpm | 25-49 wpm | 50-74 wpm | 75-99 wpm | 100+ wpm |
| Agrammatism: omission of words and morphemes, especially closed class; "telegraphic speech" | severe | marked | moderate | mild | normal |
| Paragrammatism: substitution of closed class items; inappropriate juxtaposition of words and phrases; garbled syntax | severe | marked | moderate | mild | normal |
| Anomia: word-finding pauses, word-finding failures, abandoned utterances, effective circumlocution | severe | marked | moderate | mild | normal |
| Empty speech: vague words, overabundance of closed class words, ineffective circumlocution, utterances unclear in meaning and/or tangential | severe | marked | moderate | mild | normal |
| Semantic paraphasias: substitution of open class items (including perseverations) | severe | marked | moderate | mild | normal |
| Phonemic paraphasias and neologisms | severe | marked | moderate | mild | normal |
| Self-correction: false starts, retraced sequences, conduite d'approche | severe | marked | moderate | mild | normal |
| Overall communication impairment | communication fragmentary; examiner carries burden | communication limited; participant shares burden | can discuss everyday topics; limited beyond that | impairment evident, but can discuss all topics | no impairment evident |

If not possible: [ ] No spontaneous speech [ ] Only incomprehensible muttering [ ] Only stereotypies [ ] Fewer than 10 wpm, typically mainly 'yes', 'no', a few single words or attempts

## 3. Word comprehension

Present stimulus card 2. Say 'Show me the...' Score as follows: 4 = correct; 3 = correct, but delayed $>3$ seconds, self-corrected, or repeated; $1=$ related foil; $0=$ unrelated foil, or no response within 6 seconds.

| (a) elephant | Related: camel, bear |  | [0] [1] [3] [4] |
| :--- | :--- | :--- | :--- |
| (b) piano | Related: trumpet, cello |  |  |
| (c) camel | Related: elephant, bear |  | $[0][1][3][4]$ |
| (d) trumpet | Related: piano, cello |  | [0] [1] [3] [4] |
|  |  |  | [0] [1] [3] [4] |

Present stimulus card 3.

| (e) cat | Related: can |  | [0] [1] [3] [4] |
| :--- | :--- | :--- | :--- |
| (f) box | Related: socks, fox |  |  |
| (g) cane | Related: can |  | [0] [1] [3] [4] |
| (h) socks | Related: box, fox |  | [0] [1] [3] [4] |
|  |  | $[0][1][3][4]$ |  |

## 4. Sentence comprehension

Say 'Answer yes or no...' Score as follows: 4 = correct. Nodding and shaking the head, other contextually appropriate alternatives to yes/no, e.g. 'sometimes', 'I don't think so', or idiosyncratic responses that demonstrate understanding are acceptable; $3=$ correct, but delayed >3 seconds, self-corrected, or repeated; 2 = idiosyncratic response where it is unclear whether or not patient understands; $1=$ incorrect, but response suggests some partial comprehension; $0=$ incorrect/no response within 6 seconds.
(a) Am I wearing a [color] [shirt/dress]? (Y)
(b) Are you wearing a [color] [shirt/dress]? (N) $\qquad$ [0] [1] [2] [3] [4]
(c) Do you brush your teeth with a comb? (N) $\qquad$ [0] [1] [2] [3] [4]
(d) Are babies named by parents? (Y) $\qquad$ [0] [1] [2] [3] [4]
(e) Do you take pictures with a camera? (Y) $\qquad$ [0] [1] [2] [3] [4]
(f) If you're about to finish, have you finished yet? (N) $\qquad$ [0] [1] [2] [3] [4]
(g) Are people taxed by governments? (Y) $\qquad$ [0] [1] [2] [3] [4]
(h) If you're about to go inside, are you still outside? (Y) $\qquad$ [0] [1] [2] [3] [4]
(i) Are wolves attacked by deer? (N) [0] [1] [2] [3] [4]
(j) If he was at the show when you arrived, did he get there first? (Y) $\qquad$ [0] [1] [2] [3] [4]
(k) Are thieves robbed by victims? (N) [0] [1] [2] [3] [4]
(I) If I tell you I used to drink coffee, do you think I drink coffee now? (N) [0] [1] [2] [3] [4]

## 5. Picture naming

Present stimulus card 5. Ask 'What is this? And this? etc.' Score as follows: 4 = correct. Accept reasonable alternative labels; 3 = correct, but delayed >3 seconds or self-corrected; $2=$ at least half of the phonemes are correct, or apraxic error on target; $1=$ some relation to target; $0=$ unrelated response, or no response within 6 seconds.

| (a) bed |  | [0] [1] [2] [3] [4] |
| :--- | :--- | :--- |
| (b) flower |  | [0] [1] [2] [3] [4] |
| (c) mushroom |  | [0] [1] [2] [3] [4] |
| (d) harmonica |  | [0] [1] [2] [3] [4] |
| (e) pelican |  | [0] [1] [2] [3] [4] |
| (f) stethoscope |  | [0] [1] [2] [3] [4] |

## 6. Repetition

Say 'Repeat after me.' Score as follows: 4 = correct. Expanding contraction in (f) is acceptable; 3 = correct, but delayed $>3$ seconds, selfcorrected, or repeated; $2=(\mathrm{a}-\mathrm{d})$ at least half of the phonemes are correct, or apraxic error on target; (e-f) at least half of the words are correct; 1 = some relation to target, $2+$ words for (e) and (f); $0=$ unrelated response, or no response within 6 seconds.
(a) head
(b) brother
(c) proximity $\qquad$
(d) inconceivable $\qquad$ [0] [1] [2] [3] [4]
(e) The baby drinks from a bottle.
(f) The confident vocalist realized where we'd be staying.

## 7. Reading aloud

Present stimulus card 6. Say ‘Read these words and sentences out loud.' Score as follows: 4 = correct. Expanding contraction in (f) is acceptable; $3=$ correct, but delayed $>3$ seconds, self-corrected, or repeated; $2=(a-d)$ at least half of the phonemes are correct, or apraxic error on target; (e-f) at least half of the words are correct; $1=$ some relation to target, $2+$ words for (e) and (f); $0=$ unrelated response, or no response within 6 seconds.
(a) pot
[0] [1] [2] [3] [4]
(b) cough $\qquad$ [0] [1] [2] [3] [4]
(c) prohibition
[0] [1] [2] [3] [4]
(d) unforgettable
[0] [1] [2] [3] [4]
(e) The dog sleeps on the floor.
(f) The ethical accountant understood why I'd been hiding.
[0] [1] [2] [3] [4]

## 8. Motor speech

Ask patient to perform tasks (a), (c) and (d) as quickly as possible. Ask them to hold vowel in (b) as long as possible, up to 15 seconds. Counting can be done at normal rate. If motor speech deficits are suspected, additional items may be given (e.g. pursing and retracting lips, $t_{\wedge} t_{\wedge} t_{\Lambda}, k_{\wedge} k_{\wedge} k_{\wedge}$, catastrophe catastrophe catastrophe, sustained s ).
(a) tongue from side to side
(b) aaaaaah (voice quality)
(c) $p \wedge p_{\wedge} p_{\wedge} p_{\wedge} p_{\wedge}$ (rate/rhythm)
(d) $p_{\Lambda} t_{\Lambda} k_{\Lambda} p_{\Lambda} t_{\Lambda} k_{\Lambda} p_{\wedge} t_{\Lambda} k_{\Lambda}$ (rate/rhythm)
(e) Count to 10 .

Rate motor speech using the following scales, based on the whole evaluation, not just this section.

| Motor speech feature | $\mathbf{0}$ | $\mathbf{1}$ | $\mathbf{2}$ | $\mathbf{3}$ |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Dysarthria: impairment of muscles used for speech <br> production | severe | marked | moderate | mild | normal |
| Apraxia of speech: impairment of speech motor <br> planning | severe | marked | moderate | mild | normal |

## Summary

Word comprehension

## Sentence comprehension

Word finding
Grammatical construction
Speech motor programming
Repetition
Reading
QAB overall

## Notes

