Communication Aid to Capacity Evaluation - CACE

A Communicatively Accessible Capacity Evaluation to Make Admissions Decisions

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Manual

Introduction

This manual has been developed for capacity evaluators who are determining if patients/clients living with communication barriers have the capacity to make an admission decision to long-term care. The manual will provide the background to consent and capacity, information on the development and measurement of the Communication Aid to Capacity Evaluation (CACE), and how to effectively administer and score CACE.

Background

In Ontario, Canada, the evaluation of capacity to make an admissions decision whether or not to go to a long-term care home is governed by the *Health Care Consent Act* (1996).[1] Capacity is defined as the ability to understand relevant information and the ability to appreciate the reasonably foreseeable consequences of a decision or lack of decision. Members of specified regulated colleges in Ontario are eligible to evaluate capacity. These include: the Colleges of Audiologists and Speech-Language Pathologists, Dietitians, Nurses, Occupational Therapists, Physicians and Surgeons, Physiotherapists, Psychologists and Social Workers. The Ministry of Health and Long Term Care devised a capacity evaluation tool entitled 'The Capacity to Make Admission Decisions' questionnaire. The questionnaire comprises five open-ended questions that act as a framework for a conversation allowing the evaluator to probe for information to determine capacity. The dilemma arises when a patient/client's speech, language or hearing skills are compromised; how do these individuals show their capacity?

Development

CACE is an adaptation of the 'The Capacity to Make Admission Decisions' questionnaire, incorporating legal requirements from the *Health Care Consent Act*, and is the product of the author's doctoral research. The Placement Aid to Capacity Evaluation (PACE), a tool providing an extensive list of placement questions and prompts created by Rivers and Wong, was also used in the developmental process. CACE was created in conjunction with three working groups comprising social workers and speech-language pathologists representing services across the continuum of healthcare, and a group of people with aphasia living in the community. CACE uses graphics and text to support comprehension and expressive communication. A panel of experts from a variety of academic fields and service providers measured the face and content validity of CACE (see appendix 1). The panel determined whether or not CACE reflected the content of the current capacity questionnaire and relevant sections of the *Health Care Consent Act*. Content and face validity was rated high (4.3/5).

Measurement of CACE

Following Research Ethics Boards approval, the effectiveness of CACE as a capacity evaluation tool for people with aphasia was measured using a randomized controlled trial in combination with qualitative measures. Strategies were included to reduce bias.

Participants: Thirty-three social work participants were recruited from Sunnybrook Health Sciences Centre, Providence Healthcare, and North York General Hospital in Toronto, London Health Sciences Centre and the Ottawa Hospital. Thirty-three participants with aphasia were recruited from the Aphasia Institute and Providence Healthcare outpatient speech-language pathology department in Toronto, Western University Aphasia Program London, the York Durham Aphasia Centre and the

Aphasia Centre of Ottawa. No participant was considered ineligible based on gender, race, education, literacy, English competency, hearing loss or concomitant diagnoses of dysarthria or apraxia. The participants with aphasia were judged to have the capacity to make an admission decision by a speech-language pathologist. The social workers were blinded to this information. The social workers and participants with aphasia were partnered according to site and randomly divided using computer software into an experimental group and control group. Two participants were lost to attrition leaving 17 participant pairs in the experimental group and 15 pairs in the control group.

Procedure: Both groups completed the current Capacity to Make Admission Decisions questionnaire to establish a baseline measurement of capacity. The social work participants also completed surveys measuring their communication skills, and confidence regarding capacity determination. The participants with aphasia completed a communicatively accessible survey measuring their frustration with the evaluation process. The experimental group evaluators were introduced to CACE and watched a training DVD focusing on the effective administration of CACE and techniques to maximize communication. Evaluators in the control group were sent information on aphasia published by the York Durham Aphasia Centre. Following a two-week interval to counter the variable of learning, the control group re-administered the original capacity questionnaire and the experimental group completed CACE. The surveys were also re-administered. All the capacity evaluations were video-recorded and analyzed. Three independent Speech-Language Pathologists (S-LPs) viewed the recordings and administered the Measure of Skill in Supported Conversation (MSC) and Measure of Participation in Conversation (MPC)[2] (Intraclass Correlations .69-.93).

Results:

1) **Accurate capacity determination -** With the use of the current Capacity to Make Admissions Decisions questionnaire 25.5% (12/47) of the social workers were unable to determine capacity and one social worker found a competent person with aphasia lacking in capacity. When using CACE with communication training, 100% of the social work evaluators determined that the participants with aphasia had the capacity to make an admission decision.

2) **Communication Skills -** The difference between the experimental and control groups pre and post intervention (CACE with communication training) was measured using an Analysis of Covariance (ANCOVA) (SPSS-18)

Table 1: Group and time differences in the use of Supported Conversation and Conversation Participation

	Dependent Variable Time 2	Mean		Std. Error		F	Sig.	Partial Eta Squared	Cohen's *d*
MSC	Acknowledging Competence	3.24	3.66	.118	.111	6.50	.016	.183	.88
MSC	Revealing Competence	3.13	3.71	.112	.115	12.04	.002	.293	1.13
MPC	Interaction	3.31	3.64	.111	.105	4.84	.036	.143	.60
MPC	Transaction	3.06	3.61	.122	.114	10.52	.003	.266	.99

Key: MSC = Measure of Skill in Supported Conversation, MPC = Measure of Participation in Conversation

CACE with communication training significantly improved the social work participants' abilities to acknowledge and reveal competence (MSC), and the participants with aphasia to interact and transfer information (MPC).

3) **Confidence in Capacity Determination -** The Group*Time result which compares the two groups (experimental vs. control) across two administrations was analyzed using a Repeated Measures Analysis of Variance (ANOVA). The results showed that the difference in the confidence levels of the social work evaluators to determine capacity using CACE as compared to CMAD was highly significant (f (1, 31) = 13.511, p = .001).

4) **Participants with Aphasia, Communicative Frustration –** A Paired Samples t-test was carried out to measure changes in the levels of frustration felt by the participants with aphasia regarding the communication support they received from the SW evaluator. The use of CACE with communication training reduced frustration.

Table 2 Differences in the Experimental Groups' levels of Frustration Pre and Post-Intervention

Group	N	Mean	SD	*t*	*p*
Pre	17	2.8	1.17	-3.598	.002
Post	17	3.8	.281		

5) **Statistical Power and Effect Size**

The calculation of the statistical power of a test and effect size helps to assess the clinical or practical importance of the results of tests of statistical significance. Cohen's *d* was calculated by finding the difference between the pre and post intervention MSC and MPC mean scores for the experimental group. The difference between the two mean scores was divided by the combined standard deviation. The greater the effect size, the greater the practical or clinical significance. Effect sizes of .20 are small, .50 are medium, and .80 are large.

Table 3 Cohen's d Effect Size and Statistical Power Calculations using MSC and MPC Results Pre and Post-Intervention in the Experimental Group

	Exp grp pre		Exp grp post		Cohen's *d*	Statistical Power
	M	SD	M	SD		
MSC Acknowledge	3.05	.68	3.61	.56	.88	.81
MSC Reveal	2.97	.60	3.67	.66	1.13	.93
MPC Interaction	3.26	.68	3.64	.58	.60	.52
MPC Transaction	2.8	.83	3.5	.54	.99	.87

Use of CACE in Real Time

Following the Randomized Controlled Trial, CACE has been used at Sunnybrook Health Sciences Centre. The evaluators report increased confidence in their determinations of patient/client capacity or lack of capacity to make an admission decision to long-term care.

Implications

Erroneous finding of incapacity are found in the Canadian Legal Information Institute (CLII) database of appeal findings, and have been reported in the literature.[3] In the course of this research a competent woman with aphasia, 42 years of age, was found lacking in capacity. The use of CACE with communication training was shown to be effective with this population. All patients and clients have the right to a fair and accessible evaluation of capacity to decide where and how to live.

Instructions for Administration

The Communication Aid to Capacity Evaluation (CACE) was designed to be used with adult patients/clients who have a communication disorder or barrier. Please follow all of the instructions to maximize your ability to evaluate whether your patient/client has the ability to ***understand*** information that is relevant to making a decision about admission to a long term care home, and has the ability to ***appreciate*** the reasonably foreseeable consequences of his or her decision or lack of decision.

We strongly recommend you view the training DVD before you administer CACE

1) Chart Review and Team Consultation

To ensure that your capacity evaluation is fair, gather background information about the patient/client. Conduct a thorough chart review and consult with members of the healthcare team, especially the speech language pathologist. Note the existence of any condition that could affect the capacity evaluation, for example, mental health issues such as depression, delusions, anxiety and aggressive behaviours, or other issues such as sleeping problems, dehydration, malnutrition, pain, fever and cognitive deficits.

This chart review can be found with the **CACE Response Form**. *(see appendix 2 for examples of completed chart reviews)*

Communication	**Present**	**Not Noted**	**Comments**
Disorders, e.g. Aphasia, Dysarthria, Apraxia, Anomia			
Most effective form of communication. (Consult with SLP)			
English/French as an acquired language. Interpreter available			
Hearing impairment Hearing aid			
Visual impairments Visual field deficits, neglect, cataracts etc.			
Any other communication barrier			

Name of Substitute Decision Maker: _____
(Power of Attorney for Personal Care)
Unknown: ☐

2) When to administer CACE

- Evaluate capacity at the best time of day for the patient/client, when she/he is most responsive.
- Evaluate capacity when **you** have sufficient **time**.
- Be prepared to complete CACE over a number of sessions if needed.

3) Where to administer

- Evaluate capacity in a quiet place, free of distractions.
- Sit the patient/client opposite you with the light on **your** face. If the patient/client can see you clearly it helps to focus attention and communication.
- Ensure that the patient/client is as comfortable as possible to avoid physical distraction of pain.
- Preserve patient/client privacy.

4) How to administer

CACE

- Suggestions and prompts have been provided in the Evaluator's version of CACE. They appear in red boxes. Use CACE with the patient/client.
- You will see lines throughout CACE, e.g. ***"_____ is worried about you living at home".*** These are designed to make the tool personal to the patient/client and his or her circumstances.
- Relate the pictograms to the patient/client's context, e.g., if he or she lives in an apartment building, point to that picture when talking about 'home'.
- An Orientation section has been included but its use is optional.
- 'Yes/No/Don't know' and 'Stop I have a Question/Comment' Cards have been included. These should be introduced early in the evaluation. Emphasize that they are for both the patient/client's use and for you to help you understand and verify information.
- Addendums provide further information on legal constructs. They include: 1) Substitute Decision Maker, 2) Consent and Capacity Board and 3) Office of the Public Guardian and Trustee.

Patient/client

- The questions in CACE are designed to be a framework for a conversation. Encourage the patient/client to expand on ideas and ask you questions.
- If you are administering CACE with a colleague, introduce him or her to the patient/client.
- Observe the patient/client carefully. Use the communication supports in CACE only if they are needed.
- Look for non-verbal communication, acknowledge and verify: "You are shaking your head, so you do not agree."
- Make sure that the patient/client can clearly see the pages of CACE. If needed, cover parts of a page with a blank sheet of paper to help focus attention.
- Give the patient/client adequate time to take in information and respond. Careful observation of the patient/client will help you determine whether he or she needs more time.
- Adapt your language so the patient/client understands you; for example, use "nursing home" if the patient/client does not understand "Long Term Care Home".
- Repeat or rephrase a question if the patient/client needs help to understand.

Items to Remember

- Does the patient have a ***communication book*** or ***communication system***? Familiarize yourself with how it works before you evaluate capacity.
- Check that the patient/client has ***glasses*** and/or a ***hearing aid*** and check that they are working.

- Have paper and markers close to hand.

Stop administration of CACE when:

- The patient/client becomes **excessively** frustrated, agitated, emotional or fatigued.
- The patient/client is unable to understand the questions after repetition, rephrasing and showing the CACE pictures.
- The patient/client is non-responsive or responses are unclear, for example, if the patient/client does not look at the picture choices he/she selects, or makes non-specific gestures as a response.

5) Scoring CACE

- Circle choices and record the patient/client's verbal responses verbatim. We recommend doing this in the body of CACE. It helps to verify information and enables you to refer back to choices.

- Record the patient/client's non-verbal responses. These could include:
    - Writing or drawing
    - Pointing to a picture or items (body part, objects, elsewhere)
    - Sounds with positive or negative intonation
    - Head nodding for YES or AGREEMENT
    - Head shaking for NO or DISAGREEMENT
    - Shrugging shoulders for 'unsure' or 'don't know'
    - Gestures and facial expressions
    - Purposeful eye gaze
    - Other symbols of intent or acknowledgement

- A separate **CACE Response Form** is provided. Its use is optional. The Response Form can be placed in the patient/client's health record.

- You can determine whether or not the patient/client understands or appreciates each section. If you are questioning you determination, select 'unsure' and return to the section at another time.

- Record whether or not the patient/client has the capacity to make an admission decision, does **NOT** have the capacity, whether a further evaluation is required following patient/client education, or whether he or she refuses to be evaluated.

Supported Conversation for Adults with Aphasia (SCA™) Techniques

Supported Conversation for Adults with Aphasia (SCA™) is a variety of communication techniques that have proved to be beneficial when interacting with people with aphasia and other communication barriers.[4] The relevant SCA™ techniques for capacity evaluation are illustrated in the training DVD.

We strongly recommend you view the training DVD before you administer CACE

It is also recommended that you practice these communication techniques. The use of CACE is designed to be flexible. There will be times when, as an evaluator, you will have to leave CACE to pursue novel information given by the patient/client. By using SCA™ techniques combined with CACE the patient/client's capacity to understand and appreciate relevant information will be revealed.

Observe the patient/client carefully to see how much support is needed

Getting the Information In (understanding):

- Speak at a slower rate, but keep your natural speaking voice.
- Group information into manageable units to help your patient/client understand and process:

  "My name is Sarah, I am a social worker" ***pause*** "I would like to talk to you about your discharge" ***pause*** "We could go to my office where it is quieter."

- Write down **key words** to help get your message across. Key words carry the meaning in an utterance

  "My name is **Sarah** ***pause*** I am a **Social Worker** ***pause*** I would like to **Talk** to you about your **Discharge**"

- Point to the words and pictographs in CACE while you are talking to help understanding.
- Use natural gestures, facial expression, pointing and drawing to support your message.

Getting the Information Out (communication):

- Give the patient/client time to communicate. Encourage verbal responses if possible.
- Ask an open-ended question, it helps to set the context of the question. For example, "Who helps you at home?" However, if the patient/client is unable to answer, use the pictographs and text in CACE to help him or her to respond.
- During the evaluation give the patient/client opportunities to ***add*** information or ***ask*** questions (see enclosed card for your use). We suggest you do this at the end of each section.

- If the patient/client needs help to ask a question use the pictographs to assist you, for example, at the end of section 3:
  "Is your question about the bathroom, fire or feeling sick?" *(Patient/client points to the bathroom)*
  "Is your question about one of these pictures?" *(Patient/client points to Lifeline)*
  "Do you want to know more about Lifeline?" *(Patient/client indicates 'yes')*
  "We can talk about Lifeline afterwards; I'll help you with it"

- If his or her question is about something else, provide logical, contextual choices. Always include "something else" to let the patient/client communicate that you are on the wrong track.
  "Is it about this **evaluation** or **something else**?"

- Encourage the patient/client to use gesture, drawing, writing or pointing to previous pictures.
  "Can you show me? Can you draw or write something to help me? Is it about one of these pictures?"

Verify Information:

Verify frequently, it will keep both of you on track, save time and help you to confirm whether the patient/client both understands and has been understood.

"So, you showed me that you do **not** need help at home" *(Point to the picture showing no help).*
"I want to make sure that I've got it right".
"Do you need help at home?" *(Write words* **help** *and* **home***)*
"YES" or "NO" *(Use* Yes/No/Don't know *card)*

Communication Training

Both the CACE training DVD and Instructions for Administration introduce ***Supported Conversation for Adults with Aphasia*** (SCA™). It is recommended that further training in this communication approach be considered, especially if you interact with patients/clients with communication barriers on a regular basis. The following Aphasia Centres offer training sessions:

The Aphasia Institute
73 Scarsdale Road
Toronto
ON M3B 2R2
(416) 226-3636
www.aphasia.ca

The York Durham Aphasia Centre
March of Dimes / York-Durham Aphasia Centre
13311 Yonge St. Suite 202
Richmond Hill,
ON L4E 3L6
(905) 773-7758 ext. 6212 1-800-567-0315
www.ydac.on.ca

Adult Recreation Therapy Centre
408 Henry Street
Brantford
ON N3S 7W1
519-753-1882
jroadhouse@sympatico.ca

Niagara Aphasia Centre
Fairhaven Adult Day Service
3568 Montrose Road,
Niagara Falls
ON L2E 6S
905-371-1569
niagaraaphasiacetre@gmail.com

The Aphasia Centre of Ottawa
2081 Merivale Road, Suite 300 (Country Place)
Ottawa,
ON K2G 1G9
(613) 567-1119
www.aphasiaottawa.org

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1. Health Care Consent Act (1996) www.elaws.gov.on.ca/html/statutes/english/elaws_statutes_96h02_e.htm

2. Kagan, A., Winckel, J., Black, S., Duchan, J. F., Simmons-Mackie, N., & Square, P. (2004). A set of observational measures for rating support and participation in conversation between adults with aphasia and their conversation partners. *Topics in Stroke Rehabilitation, 11*(1), 67-83.

3. Carling-Rowland. A and Wahl J. (2010) The Evaluation of Capacity to Make Admission Decisions: Is it a fair process for Individuals with Communication Barriers? *Medical Law International Journal* 10 (3)

4. Kagan, A., Black, S., Duchan, J.F., Simmons Mackie, N. & Square, P. (2001). Training volunteers as conversation partners using 'supported conversation for adults with aphasia: A controlled trial. *Speech, Language and Hearing Research,* 44 624-638

Placement Aid to Capacity Evaluation (PACE) Rivers, P and Wong C. Paul.Rivers@uhn.on.ca

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Appendices

Appendix 1 *Panel of Experts Face and Content Validity Survey Results*

Panel member	Adapted reflects original	Patient understands	Patient appreciates	Enhance autonomy	Promote communication	Presumed Capable	Understands process	**Mean**
1	5	5	4	5	5	5	5	4.85
2	5	4	4	5	5	5	4	4.57
3	5	5	5	5	5	5	5	5
4	5	5	4	5	5	5	5	4.87
5	5	2	2	4	4	4	2	3.28
6	4	5	3	3	5	4	4	4
7	5	4	4	5	5	5	4	4.75
8	5	4	4	4	4	4	3	4
9	4	5	1	5	5	1	4	3.57
10	4	4	4	4	4	3	4	3.8
11	5	5	5	5	5	5	5	5
Total **Mean**	52 4.7	48 4.4	40 3.6	50 4.5	52 4.7	46 4.2	45 4.1	 4.33

Appendix 2 Two examples of Chart Reviews

Communication	**Present**	**Not Noted**	**Comments**
Disorders, e.g. Aphasia, Dysarthria, Apraxia, Anomia	✓		Moderate Broca's aphasia, word finding deficits.
Most effective form of communication. (Consult with SLP)	✓		Speak in short utterances and give time to process language. Write key words, encourage pt. to point to written choices, verify pt.'s utterances.
English/French as an acquired language. Interpreter available		✓	
Hearing impairment Hearing aid	✓		Aided in Right ear. Make sure pt. can see your face and check he can hear you.
Visual impairments Visual field deficits, neglect, cataracts etc.	✓		Glasses for reading, right visual neglect. Present CACE on pt.'s left side to ensure he can see the pages
Any other communication barrier	✓		Can get frustrated with his communication barriers. Give him a few breaks during the evaluation process.

Communication	Present	Not Noted	Comments
Disorders, e.g. Aphasia, Dysarthria, Apraxia, Anomia	✓		*Global aphasia with apraxia*
Most effective form of communication. (Consult with SLP)	✓		*Speak in short utterances and give pt. time to process language. Use gestures and facial expression. Draw as you speak. Encourage pointing to pictures to select answer*
English/French as an acquired language. Interpreter available	✓		*Bilingual Italian /English. Born in Italy, came to Canada when 7 years old. Spoke English fluently before the stroke. Responds to a combination of languages*
Hearing impairment Hearing aid		✓	
Visual impairments Visual field deficits, neglect, cataracts etc.	✓		*Glasses for reading, right visual neglect. Present CACE on pt.'s left side to ensure he can see the pages*
Any other communication barrier	✓		*Reduced attention, can get distracted. Keep him focused and complete CACE over a couple of sessions*