

**The Ontario Centres for Learning, Research and Innovation in
Long-Term Care at Baycrest**

Dementia Simulation Toolkit

Version 2.0 Summer 2018

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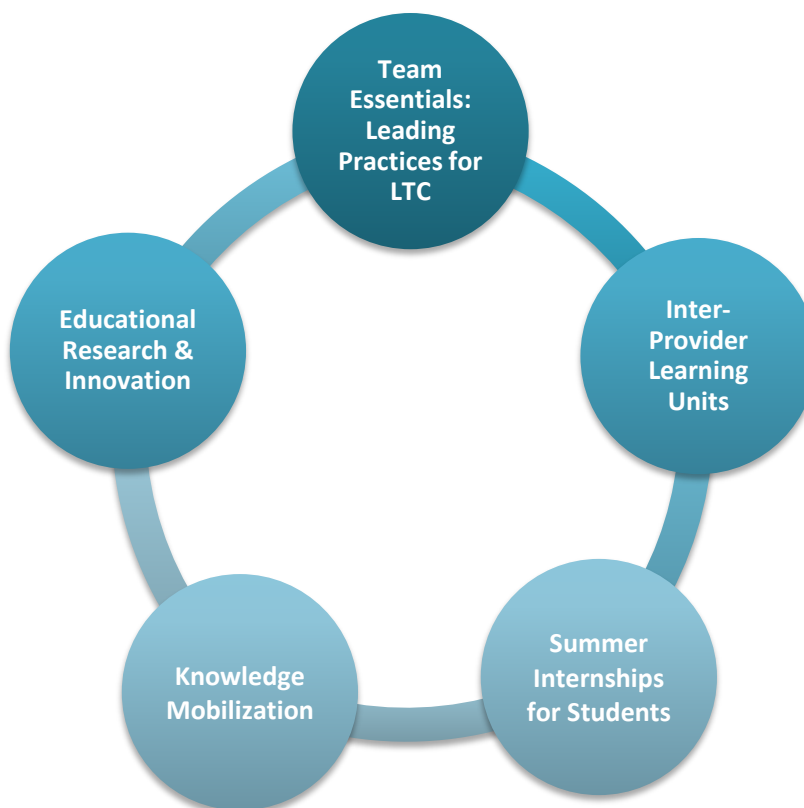


Figure 1. Baycrest CLRI Programs

There are 3 host sites: Schlegel in Waterloo, Bruyère in Ottawa and Baycrest in Toronto. The mandate of the Ontario CLRI Program is to enhance the quality of seniors' care through education, research, innovation, evidence-based service delivery and design and knowledge mobilization. The Program at Baycrest focuses on developing and evaluating educational innovations to enhance interprofessional competencies in the current and future long-term care workforce.

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What is Simulation?

By Dr. Bruce Ballon

Simulation is the imitation or emulation of some real thing, state of affairs or process. It is a methodology to help achieve educational goals. The most powerful and efficacious simulations are conducted based on strong educational principles, run by expert facilitators and within the context of the objectives of a curriculum.

Simulation used for healthcare encompasses a range of activities that share a broad, similar purpose: to improve the safety, effectiveness and efficiency of healthcare services.

Simulation can include a variety of modalities, ranging from:

- **Manikins**
- **Task trainers**
- **Simulated participants**
- **Moulage and props**
- **Environmental elements**
- **Psychological factors**
- **E-blended learning and E-simulations**
- **Film and video**
- **Hybrid forms of the above**

The key to using simulation effectively is to match appropriate levels of fidelity of a simulation to the learning objectives and level of training of the learners. High fidelity simulations, such as manikins, are not needed for every type of learning encounter— and in fact may be poorly matched for the needs of the session. Cost-effective choices of using what is needed to create the proper level of challenge and maintain the simulation “reality” is the true art of the simulationist.

Simulations can be created for individuals, teams and agencies to improve patient safety (e.g., creating scenarios that enhance communication, management skills and assessment abilities). Simulation can be geared to the learners’ experience and the context of training. One can match the intensity and goals of a simulation for new students to seasoned, well trained teams of healthcare providers. Simulations can also guarantee that learners be exposed to certain healthcare situations that are rare and often would not come up during training, but may help them when they go into the field. Due to the multiple ways of observing a simulation, a rich wealth of feedback is available for learners to absorb and use in their development as healthcare providers.

What is a Simulationist?

By Dr. Bruce Ballon

Often healthcare simulation education is run by those whose official primary designation is in one or another branch of healthcare (i.e. the nurse clinician specialist, an EMS trainer, an allied health professional and so on). The goal in creating the concept of the simulationist is to help promote being a simulation expert as a primary role in healthcare, for such a role is going to be important in helping transform how we educate and train our future healthcare providers.

A simulationist is an educational expert in the knowledge, skills and attitudinal aspects of using the methodologies of simulation to achieve learning objectives.

A content expert in one branch of healthcare does not equate to having the knowledge, skills or attitudes to bringing such content to life in the experiential way a simulationist can. Neither does it mean that a content expert has the ability to brief, debrief and facilitate such experiences in an effective and safe manner.

A technician who can run the technical devices or a human factor who is trained to play a role does not always equate to being able to do the educational aspects in simulation. However, over time, many in such fields start to develop, or wish to develop, those missing aspects.

Thus, the simulationist combines the aspects of the educator, the technician, the role player, the writer, the briefer/debriefer/facilitator, with mastery of creating a rich and collaborative learning climate of discovery for their learners and trainees. They employ appropriate levels of fidelity from a variety of simulation modalities to help reach the learning objectives for the participants. These concepts should be grounded in sound learning theories that support the use of simulation in the most effective ways. The simulationist must also, like any major production, do many things behind the scenes, such as detail management, budget control, keep to timelines and be a trouble-shooter extraordinaire. Along the way, the abilities to incorporate new special effects, set design and the art of iteration flourish in the simulationist.

The capable simulationist's major abilities include helping learners deal with their resistance to simulation, helping educators incorporate simulation into curricula and demonstrating ways to create formative and summative simulation experiences.

What is a Facilitator?

There are a variety of definitions for a facilitator:

Doyle (2007)

An individual who enables groups and organizations to work more effectively; to collaborate and achieve synergy. He or she is a 'content neutral' party who by not taking sides or expressing or advocating a point of view during the meeting, can advocate for fair, open, and inclusive procedures to accomplish the group's work. (p. xiii)

Bens (2000)

One who contributes structure and process to interactions so groups are able to function effectively and make high-quality decisions. A helper and enabler whose goal is to support others as they achieve exceptional performance. (p. 5)

Kaner (2007)

The facilitator's job is to support everyone to do their best thinking and practice. To do this, the facilitator encourages full participation, promotes mutual understanding and cultivates shared responsibility. By supporting everyone to do their best thinking, a facilitator enables group members to search for inclusive solutions and build sustainable agreements. (p. 32)

A Dementia Simulation Toolkit to Shift Values & Attitudes

The Ontario CLRI at Baycrest develops and evaluates innovative educational approaches designed to enhance not only knowledge and skills, but also values and attitudes in learners. With the assistance of interprofessional summer interns, an initial dementia simulation was created and trialed. A final version is presented here in the form of a toolkit. The scripts and resources in this toolkit have evolved over time using a quality improvement approach and are meant to foster participant awareness and insight into living life with frailty and dementia.

This toolkit contains:

- **Information facilitators need to know regarding dementia and dementia**
- **Simulation techniques and sample scenarios based on common experiences of the elderly in the healthcare system**
- **Additional modifications for the scenarios**
- **Ideas on how to structure the simulation session for an interprofessional audience, including the debrief**

As a result, this toolkit will allow users to:

- **Identify and utilize dementia simulation techniques and scenarios**
- **Use these simulations to engage participants in reflection and develop a deeper understanding of dementia and frailty**

Toolkit Learning Objectives

1. Increase knowledge and understanding of the cognitive signs and symptoms of dementia

The prevalence of dementia is increasing in our society as a whole, and healthcare providers and providers must gain a strong understanding of the impact of this disease based on the care that is required. This simulation intends to increase a person's awareness of knowledge about cognition and dementia.

2. Enhance empathy and increased awareness of attitudes towards the frail elderly with dementia

This simulation can challenge common assumptions and support enhanced empathy and attitudes towards dementia and the elderly.

3. Enhance the care practices of healthcare providers

As a form of experiential learning (i.e., learning thorough reflection on doing), simulation enables healthcare providers to integrate different ways of knowing (e.g., thinking, feeling, perceiving and doing) to improve care practices. This simulation aims to enhance a person's understanding of the common challenges that the frail elderly face regarding changes in perception, cognition and language. Through reflection during debriefing, participants have the opportunity to consider implications for practice.

Cognition & Dementia

Cognition is the ability to utilize executive functioning to plan, organize and sequence tasks; and to recognize and utilize language in order to express ourselves and understand others (Larson, 2015). In addition, cognition reflects our ability to recall recent and remote information (memory); how we learn, retain and manipulate new information; our thought processes; how our reality is perceived; visual and spatial abilities; attention and concentration. As we encounter clients living with dementia, we need to recognize that some or all of these abilities may be affected, at varying times.

In order for a person to be diagnosed with dementia, a licensed and qualified healthcare practitioner must assess and find evidence of impairment in at least one of the following cognitive domains (APA, 2013):

1. **Executive functioning (organizing information, planning, sequencing)**
2. **Learning and memory**
3. **Language (expressing and understanding)**
4. **Complex attention**
5. **Perceptual-motor function**
6. **Social cognition**

The 8 As of Dementia

Dementia is a word that describes a variety of brain disorders. The 8 As of dementia refer to a group of symptoms that commonly manifest in people with dementia. The 8As consist of: anosognosia, agnosia, aphasia, apraxia, altered perception, amnesia, apathy and attentional deficits. Keep in mind that a person with dementia may not always experience all of the As and that dementia manifests differently for every person.

The 8 As of dementia allows for a simple way to remember this group of symptoms of dementia. The scenarios presented in this toolkit will address varied combinations of the As. As described by the **Alzheimer's Society** (Source: <http://www.alzheimer.ca/en/york/About-dementia/What-is-dementia/Seven-A-s-of-dementia>), the first 7 As are:

1. Anosognosia

This means that you can no longer recognize that something has changed and that there is something wrong. You might not understand why you have cognitive problems or that you are experiencing any problems at all. Because the part of your brain that helps you reason is damaged, you do not see the changes in your abilities that others may see.

2. Agnosia

This means you can no longer recognize things through your senses: sight, sound, taste, touch, and smell. You might not be able to sort out what you see or hear. You might have trouble recognizing familiar people. Your safety may be at risk if this part of the brain is affected because you might confuse objects and what they are used for.

3. Aphasia

This means you lose the ability to use and/or properly decode language. This includes the ability to speak, understand, read and write. Although a person may retain the ability to speak for some time, the ability to understand what other people are saying may be affected early in the disease. If you cannot understand what is being said to you, this can lead to misunderstandings between you and those around you. You might find yourself withdrawing from social interactions because you are worried that you will not understand others or that they may not understand you. Alternatively, a person may progressively lose their ability to speak or express themselves the way they used to or want to, but their comprehension may remain intact for much longer. This happens for example in the case of Primary Progressive Aphasia. This creates frustration when attempting to communicate with others and can also lead to withdrawal from social interactions.

4. Apraxia

This means you have lost the ability to tell your body how to carry out purposeful movement. As well, if you have apraxia, you may also have trouble understanding terms such as back, front, up, down. When this happens, it becomes difficult to do things such as tying shoelaces, doing up buttons and zippers, and any activity involving co-ordination. The ability to move your body according to a certain pattern, such as coordinating hand and leg movement, also affects your ability to do specific activities such as driving. Apraxia may also affect speech, where the signals are not sent correctly from the brain to the muscles and as a result you may have difficulty producing words or you would say words you did not intend to say at all.

5. Altered Perception

This happens when you misinterpret the information your senses are giving you. For some people, this is a bigger problem in the late afternoon or early evening when light changes. Another important change is the loss of depth perception—the ability to see in three dimensions. It becomes harder to judge how high, deep, long, wide, near or far things are. For example, if the floor and furniture are the same colour, it may be difficult to judge when one is close enough to a chair to try to sit.

6. Amnesia

This means loss of memory. This is an important loss because most things we do depend on our ability to remember. For example, a person with short-term memory problems loses the ability to remember what was just said. This explains why you might find yourself asking questions over and over again. Earlier in the disease a person's short-term memory will be affected. As the disease progresses, long-term memories will become harder to retrieve.

7. Apathy

This is not being able to take initiative. The part of the brain that helps you start to do something, either to carry out an activity or to communicate, is damaged. You might find that you have difficulty beginning activities. You may need someone else to give you cues (hints) to keep you involved in a conversation or a task.

The 8th A is derived from new literature (e.g., Larson, 2015).

8. Attentional Deficits

This means a complex attention span is lacking. This is important because paying attention or focusing is needed when trying to accomplish a task. This lack of attention occurs outside the context of a delirium. For example, a person who is unable to focus may not be able to have a complete conversation or speak with someone without getting easily distracted.

Cognitive + Frail Aging Simulation: A Combined Experience

The Baycrest CLRI has also created a frail aging simulation toolkit. With this resource, there is the opportunity to combine learning objectives to include both cognitive and physical impairment. The frail aging suit allows participants to experience the following:

- | | |
|---|--|
| <p>a) Physical changes</p> <ul style="list-style-type: none"> • Movement • Posture • Gait • Strength | <p>b) Sensory impairments</p> <ul style="list-style-type: none"> • Hearing • Vision • Tactile grip |
|---|--|

Educators and leaders are seeking creative ways to engage teams in transforming care of the elderly. Resistance to change is sometimes driven by underlying values and attitudes that reflect individual experiences and collective world views. By simulating and reflecting on the **experience** of being less cognitively intact and increasingly frail, participants have the opportunity to increase their awareness of the experience of a person who has dementia and is frail.

In contrast to traditional didactic education, simulation offers alternative, immersive learning experiences that can shift beliefs.

Staff and students report a range of physical, relational and emotional experiences, as well as immediate implications and reflections for future professional practice and care.



Figure 2. CLRI Interns Trying Out the Sakamoto Suits

Previous simulation participants elucidated changes in perspective and subsequent behaviour when working with frail elderly persons with dementia. Others have reported increases in empathy and compassion. Trials with the frail aging simulation also led to increased knowledge and understanding of frail aging and their ability to empathize with geriatric clients, as reported by participants.

Through further evaluation and focus groups, it was suggested that the frail aging simulation be extended to include the link between physical limitations and dementia. In response, scenarios combining the As of Dementia were developed and tested.

Dementia with Frail Aging Simulation Scenarios

When facilitating each simulation, please keep in mind that these simulations are designed for one to experience what it is like to be a frail elderly person with dementia and that the scenarios below are intended for the participant to feel the impact of aging and disease. The experience is not designed to be comfortable and some participants have expressed distress during scenarios. Providing a safe and open environment will allow simulation participants to voice out this concern and allow the facilitator to pause or stop the scenario. Although the objective of the facilitator is to guide the participant through the scenario, the conversations are designed for the facilitator and his/her confederates to be as distant and unhelpful as possible. The facilitator and confederates are instructed to speak as quickly and softly as possible, without emotion.

Anything in quotation marks (“...”) is to be read out loud by the facilitator and/or “helper.” The sentences afterwards in parenthesis are the true meaning of the words in quotation marks. As soon as the simulation begins, the facilitator should not offer any help, unless the participant in the suit asks for it or asks for a timeout.

If the participant has attempted a task 3 times, does not ask for help and is unable to complete the task, he or she should be instructed to proceed to the next activity (e.g., participant is unable to complete task 1 - step 2, proceed to task 1 - step 3).

Simulation Scenario 1: Medical History Form

Learning Objectives

This simulation will allow individuals to experience frail aging through wearing the Sakamoto suit and symptoms that are commonly seen in persons suffering from Alzheimer's disease, specifically altered perception and agnosia.

The goal of this simulation exercise is to increase participants' awareness of the cognitive and physical limitations experienced by persons with dementia, resulting in increased empathy and generating implications for healthcare practice.

Communication and keeping detailed records is very important in any healthcare setting. Oftentimes, the best person to approach for sensitive health information is the client him/herself. As staff in a healthcare setting, this means asking the client to fill out a medical history form – a seemingly simple task.

The dementia symptoms simulated in this scenario include:

- **Altered perception, through use of vision impairment goggles, differing font sizes on the sample medical history form (See [Appendix B](#)), and mistaking a black chair for a blue chair**
- **Aphasia, as facilitators and confederates speak in “gibberish” or words that may not be understood to the participant; additionally, the words and font sizes used in the written form simulate an inability to perceive written language**
- **Agnosia, as simulated by the use of a toothbrush instead of a pen**
- **Sudden moments of clarity, when the facilitator switches back and forth from gibberish to regular English**

Symptoms of dementia that may be elicited from the participants due to an incomprehensible task include:

- **Anosognosia, made possible by the participant's abilities and the lack of awareness that in the scenario s/he can no longer recognize that something has changed**
- **Apathy, through the lack of task initiation without cuing from another person**

Equipment (per participant): Sakamoto suit, toothbrush, medical history form on a clipboard (See [Appendix B](#)), a black chair, audio device with headset and loud blaring sounds playing (if possible)

Space Requirement: 2 locations – a room to change in, a waiting room location

Confederate Roles: Assistant

Scenario Learning Objectives	Altered Perception	Amnesia	Anosognosia	Agnosia	Apathy	Aphasia	Apraxia	Attentional Deficit	Frail Aging Suit
Filling out health form	✓		✓	✓	✓	✓			✓

Clinical Case Information	
History of Present Illness (HPI)	Frailty 4-6 Alzheimer's disease
Past Medical History (PMH)	
Social History (Hx)	Supporting family, kids visit him once a week
Family History (FM)	∅
Allergies:	∅
Diet/Nutrition:	Low sugar and low salt diet
Current Medications:	
Vital Permanents:	∅
Physical Evaluation:	∅
Lab Results:	No recent lab or diagnostic test results
Image Results:	No recent images results

Briefing

Prior to starting the simulation, please brief the participants on the intent of the simulation. For example, you may say to them:

“This activity aims to mimic **both the physical limitations of frail aging as well as some symptoms of dementia** in an elderly person coming for a medical appointment. Dementia is an overall term for a set of symptoms including memory loss and difficulties with thinking, problem-solving and/or language. The symptoms may cause confusion, changes in mood and behaviour or reduce a person's desire/ability to perform these activities. **As you go through the following simulation, you will be putting yourself in the shoes of a person with dementia who is being asked to fill out a form.**

“Participation in this simulation is 100% voluntary, and if at any point you feel an extraordinary amount of discomfort or unease, please let your facilitator know. We will be sure to accommodate your needs and/or stop the simulation.”

During this time or prior to briefing the participant, you may also administer the Pre-Questionnaire (See: [Pre-Questionnaire](#)).

Setting Up

1. Put participant in the suit
2. Check: goggles, neck brace, kyphosis straps, elbow/knee constraints, gloves, cane
3. Give participant headphones/audio device
4. Play loud blaring sounds or sounds with several people speaking at the same time

Simulation

Task 1: Medical History Form

5. Confederate leads the participant to the *waiting room*
 - a. If you have time, lead the participant to a wrong location and say in a stressed voice,

“I think he comes over highway.” (I need you to come this way.)

* Gesture at them to come if they look at you needing cues.

6. Once at the *waiting room*, confederate points at the ***black*** chair and say,

“Sit on the blue chair.” (Have a seat on that blue chair.)

* Note that the stating a different colour from the chair that you are using is key.

7. When the participant sits down, say to them,

“Cyclist will come here soon. There will take you this highway today.” (The assistant will soon be with you. He’ll need information from you today.)

* Gesture at them to wait if they look at you needing cues.

8. Step away for 1 minute without providing any further instructions.

9. Confederate comes in and hands the participant a *toothbrush* instead of a pen and the *medical history form* placed on a *clipboard*

* Gesture at them to write if they look at you needing cues.

Task 2: Medical History Interview

10. Tell the participant,

“This here. I think ginger cab soon.” (Stay here, I will be back soon.)

* Gesture at them to wait if they look at you needing cues.

11. Leave the participant alone for 1 minute

* Participant should be confused and not understand what was just said

12. Come back after a minute and say,

“How you complicated form? Oh my the fireworks! Why haven’t you ginger something? Are you you ginger? Shi shi now late, I’ll drive some highway now there.” (Have you completed the form? Oh my, the pen works, why haven’t you filled out anything? Are you blind? We’re running late, I’ll just ask you some questions.)

* Gesture feelings of exasperation if they look at you needing cues.

“Did you buy ginger cereals?” (Do you have history of any serious illnesses?)

Repeat question after a 5 second delay but slower

“Did you buy any aferbies?” (Do you have any allergies?)

13. Hand participant a real pen and say,

“Ok, drive here. Wellington late.” (Okay just sign here, we’re running late!”)

* Gesture at them to write if they look at you needing cues.

14. Point at the bottom of the medical history form until participant signs the page

15. Lead the participant back to the first room

16. End simulation. Engage participant in debrief.

Simulation Scenario 2: Health Card Information & Gowning Up

Learning Objectives

This simulation will allow individuals to experience frail aging by wearing the Sakamoto suit and experiencing symptoms that are commonly seen in patients suffering from Alzheimer’s disease.

The goal of this simulation exercise is to increase participants’ awareness of the cognitive and physical limitations experienced by clients with dementia, resulting in increased empathy towards this group in future healthcare practices.

Members of the general population often take their memories and ability to remember for granted. This includes LTCH staff. However, amnesia, or memory loss, is very common in an elderly person with dementia. This scenario addresses this memory loss, and the frustrations one might feel when they are unable to properly communicate anymore.

The dementia symptoms we simulated in this scenario include:

- **Amnesia, as the participant is unable to accurately provide their birthday**
- **Altered perception, through use of vision impairment goggles, differing font sizes on the sample medical history form (See [Appendix B](#)), and mistaking a black chair for a blue chair**
- **Aphasia, as facilitators and confederates speak in “gibberish” or words that may not be understood to the participant; additionally, the words and font sizes used in the written form simulate an inability to perceive written language**
- **Agnosia, as simulated by the use of a toothbrush instead of a pen**
- **Sudden moments of clarity, when the facilitator switches back and forth from gibberish to regular English**

Symptoms of dementia that may be elicited from the participants due to an incomprehensible task include:

- **Anosognosia made possible by the participant’s abilities and the lack of awareness that in the scenario s/he can no longer recognize that something has changed**
- **Apathy through the lack of task initiation without cuing from another person**

Scenario Learning Objectives	Altered Perception	Amnesia	Anosognosia	Agnosia	Apathy	Aphasia	Apraxia	Attentional Deficit	Frail Aging Suit
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Health card Information	✓	✓		✓	✓	✓			✓
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Equipment: Sakamoto suit, sample health card (See [Appendix A](#)), toothbrush, medical history form on a clipboard (See [Appendix B](#)), a black chair, audio device with headset and loud blaring sounds playing (if possible), gown

Space Requirement: 2 locations – a room to change in, a waiting room location

Confederate Roles: Assistant

Clinical Case Information	
History of Present Illness (HPI)	Frailty 4-6 Alzheimer's Disease
Past Medical History (PMH)	
Social History (Hx)	Supporting family, kids visit him once a week
Family History (FM)	∅
Allergies:	∅
Diet/Nutrition:	Low sugar and low salt diet
Current Medications:	
Vital Permanents:	∅
Physical Evaluation:	∅
Lab Results:	No recent lab or diagnostic test results
Image Results:	No recent images results

Briefing

Prior to starting the simulation, please brief the participants on the intent of the simulation. For example, you may say to them:

“This activity aims to mimic **both the physical limitations of frail aging as well as some of the symptoms of dementia** in an elderly person coming for a medical appointment. Dementia is an overall term for a set of symptoms including memory loss and difficulties with thinking,

problem-solving and/or language. The symptoms may cause confusion, changes in mood and behaviour or reduce a person's desire/ability to perform these activities. **As you go through the following simulation, you will be putting yourself in the shoes of a person with dementia who is being asked to read education material before going for a diagnostic test.**

“Participation in this simulation is 100% voluntary, and if at any point you feel an extraordinary amount of discomfort or unease, please let your facilitator know. We will be sure to accommodate your needs and stop the simulation.”

During this time or prior to briefing the participant, you may also administer the Pre-Questionnaire (See [Pre-Questionnaire](#)).

Setting Up

1. Put participant in the suit
 - a. Check: goggles, neck brace, kyphosis straps, elbow/knee constraints, gloves, cane
2. Give participant headphones/audio device
 - a. Play loud blaring sounds or sounds with several people speaking at the same time

Simulation

Task 1: Providing health information

3. Place the health card in front of the participant and say,

“Here is your health card. Please hold on to it.”
4. Lead the participant to the *waiting room*
 - a. If you have time, lead the participant to a wrong location and say in a stressed voice,

“*I think he comes over highway.*” (I need you to come this way.)
* Gesture at them to come if they look at you needing cues.

5. Once at the *waiting room*, point at the *black* chair and say,

“Sit on the blue chair.” (Have a seat on that blue chair.)

* Note that the stating a different colour from the chair that you are using is key.

“Cyclist will come here soon. There will take you this highway today.” (The assistant will soon be with you. He’ll need some information from you today.)

6. Take the participant’s health card from them and say in regular English,

“I need to photocopy your health card. Please hand it over to me.”

7. Step away for 1 minute without providing any further instructions

8. Confederate comes in and hands the participant a *toothbrush* instead of a pen and the *medical history form* placed on a clipboard and says,

“This here. I think ginger cab soon.” (Stay here, I will be back soon.)

* Gesture at them to write if they look at you needing cues.

9. Step away for 1 minute without providing any further instructions

10. Come back after a minute, and say,

“What is your birthday?”

11. Wait for a response and then say,

“Wait, don’t you remember? That’s not what it states on your health card.”

*Participant should be relieved to hear you speak English, but no matter what answer the participant gives, tell them they are **wrong***

12. Revert back to speaking gibberish and say in frustration,

“You played golf!” (You forgot!)

13. Hand participant a real pen and say,

“Ok, just drive here. Wellington late.” (Okay just sign here, we’re running late!)

* Gesture at them to write if they look at you needing cues.

Task 2: Putting on a gown

- 14. Lead/walk in front of participant towards the *room to change in* at normal walking pace**

“Wedding gown, yes it’s lovely for our x-ray.” (Put on this gown, we need to take an x-ray.)

* Gesture at them to put the gown on if they look at you needing cues.

- 15. Leave the room for 1 minute**

- 16. Direct the participant to go to the procedure room (lead participant back to the first room)**

“I think he comes over highway this x-ray.” (I need you to come this way for your x-ray.)

* Gesture at them to follow you if they look at you needing cues.

- 17. End simulation. Engage participant in debrief.**

Simulation Scenario 3: Reading & Snack

Learning Objectives

This simulation will allow individuals to experience frail aging through wearing the Sakamoto suit and symptoms that are commonly seen in patients suffering from Alzheimer's disease, specifically altered perception and agnosia.

The goal of this simulation exercise is to increase participants' awareness of the cognitive and physical limitations experiences by clients with dementia, resulting in increased empathy towards future healthcare practices.

Leisure activities such as reading and snacking are exceptionally important in an elderly person's everyday living. They provide a change of pace in one's day-to-day life, and foster feelings of meaning, engagement, and enjoyment. However, with frailty and dementia, these previously enjoyable tasks may become difficult and burdensome. As workers in healthcare, we must be mindful and hold back from interpreting an older adult's lack of engagement as lack of function.

The dementia symptoms we simulated in this scenario include:

- **Altered perception, through use of vision impairment goggles, and differing font sizes on the sample medical history form (See [Appendix B](#)), mistaking a black chair for a blue chair, and giving participants a blank piece of paper to "read"**
- **Aphasia, as facilitators and confederates speak in "gibberish" or words that may not be understood to the participant. Additionally, the words and font sizes used in the written form simulate an inability to perceive written language.**
- **Agnosia, as simulated by the use of a toothbrush instead of a pen, and giving fake fruit**

Symptoms of dementia that may be elicited from the participants due to an incomprehensible task include:

- **Anosognosia, made possible by the participant's abilities and the lack of awareness that in the scenario s/he can no longer recognize that something has changed**
- **Apathy, through the lack of task initiation without cuing from another person**

Scenario Learning Objectives	Altered Perception	Amnesia	Anosognosia	Agnosia	Apathy	Aphasia	Apraxia	Attentional Deficit	Frail Aging Suit
Filling out health form	✓		✓	✓	✓	✓			✓

Equipment (per participant): Sakamoto suit, toothbrush, a blank piece of paper, a black chair, plastic fruit, audio device with headset and loud blaring sounds playing (if possible)

Space Requirement: 3 locations – a room to change in, a waiting room location & an assessment room location

Confederate Roles: Clinician and assistant

Clinical Case Information	
History of Present Illness (HPI)	Frailty 4-6 Alzheimer's Disease
Past Medical History (PMH)	
Social History (Hx)	Supporting family, kids visit him once a week
Family History (FM)	∅
Allergies:	∅
Diet/Nutrition:	Low sugar and low salt diet
Current Medications:	
Vital Permanents:	∅
Physical Evaluation:	∅
Lab Results:	No recent lab or diagnostic test results
Image Results:	No recent images results

Briefing

Prior to starting the simulation, please brief the participants on the intent of the simulation. For example, you may say to them:

“This activity aims to mimic **both the physical limitations of frail aging as well as some of the symptoms of dementia** in an elderly person coming for a medical appointment. Dementia is an overall term for a set of symptoms including memory loss and difficulties with thinking, problem-solving and/or language. The symptoms may cause confusion, changes in mood and behaviour or reduce a person's desire/ability to perform these activities. **As you go through the following simulation, you will be putting yourself in the shoes of a person living in long-term care with dementia who is being asked to read before having a snack.**

“Participation in this simulation is 100% voluntary, and if at any point you feel an extraordinary amount of discomfort or unease, please let your facilitator know. We will be sure to accommodate your needs and/or stop the simulation.”

During this time or prior to briefing the participant, you may also administer the Pre-Questionnaire (See: [Pre-Questionnaire](#)).

Setting Up

1. Put participant in the suit
 - a. Check: goggles, neck brace, kyphosis straps, elbow/knee constraints, gloves, cane
2. Give participant headphones/audio device
 - a. Play loud blaring sounds or sounds with several people speaking at the same time

Simulation

Task 1: Reading Material

3. Confederate in the role of assistant leads the participant to the *assessment room*
 - a. If you have time, lead the participant to a wrong location and say in a stressed voice,

“I think you come by highway.” (I need you to come this way.)

* Gesture at them to come if they look at you needing cues.

4. Once at the *assessment* room, confederate points at the black chair and say,

“Sit on the blue chair.” (Have a seat on that blue chair.)

* Note that the stating a different colour from the chair that you are using is key.

5. When the participant sits down, say to them,

Cyclist will come here soon. There will take you this highway today.” (The clinician will soon be with you. He’ll need information from you today.)

* Gesture at them to wait if they look at you needing cues.

6. Step away for 1 minute without providing any further instructions

7. Confederate in the role of clinician approaches participant with a blank piece of paper and says,

“Here, prune juice today this” (Here, I want you to read this).

* Gesture at them to read if they look at you needing cues.

8. Give participant the paper and leave room for about 3 minutes. When you return, say,

“Okay, wonder whiteness. Come drink the juice again. Dock fet.” (Okay, we’re done with you now. Come back next week for your results. Don’t forget!)

* Wave goodbye and point to waiting room if they look at you needing cues.

Task 2: Snack Time

9. If participant does not move, first confederate in the role of assistant comes in with the fake fruit and leads them to the dining room by saying,

“Estimate lounge now. Shi no no this closet chicken” (It’s time for snack now. Let’s go before they close the kitchen.)

“Ah this chicken, yes orange is the meal today.” (Here, have this orange before you have your meal).

* Gesture at them to eat if they look at you needing cues.

“It’s five this chicken nuggets. Eat bat.” (We only have 5 minutes. Eat fast!)

* Gesture at them to hurry if they look at you needing cues.

10. *Leave alone for 2 minutes*

11. End simulation. Engage participant in debrief.

Dementia Simulation Scenarios

When facilitating the simulation, please keep in mind that these simulations are designed for one to experience what it is like to be an elderly person with dementia and the scenarios below will allow the participant to experience impaired cognition. The experience is not designed to be comfortable or coherent and some participants have expressed confusion or disinterest during scenarios. Providing a safe and open environment will allow simulation participants to voice this concern and allow the facilitator to pause or stop the scenario. Although the objective of the facilitator is to guide the participant through the scenario, the conversations are designed for the facilitator and his/her confederates to be as distant, unhelpful and confusing. The facilitator and confederates are instructed to speak nonsensically but with emotional display.

Anything in quotation marks (“...”) is to be read out loud by the facilitator and/or “helper.” The sentences afterwards in parenthesis are the true meaning of the words in quotation marks. As soon as the simulation begins, the facilitator should not offer any help, unless the participant in asks for it or asks for a timeout.

If the participant has attempted a task 3 times, does not ask for help, and is unable to complete the task, he or she should be instructed to proceed to the next activity (e.g., participant is unable to complete task 1 - step 2, proceed to task 1 - step 3).

*Note that these simulation scenarios were adapted from the [Dementia with Frail Aging Simulation Scenarios](#) and do not require the use of the Sakamoto suit. The effect of the suit is greatest when participants need to walk for a long time. Thus, by foregoing the suit, facilitators have the option to adapt the following situations so they are all in one room/location.

Simulation Scenario 1: Medical History Form

Learning Objectives

This simulation will allow individuals to experience symptoms that are commonly seen in patients suffering from Alzheimer's disease, specifically aphasia, altered perception and agnosia. Anosognosia and apathy may also come into play here based on how the scenario is designed.

The goal of this simulation exercise is to increase participants' awareness of the cognitive limitations experienced by clients with dementia, resulting in increased empathy towards future healthcare practices.

Communication and keeping detailed records is very important in any healthcare setting. Oftentimes, the best person to approach for sensitive health information is the client him/herself. As staff in a healthcare setting, this may mean asking a client resident to fill out a medical history form – a seemingly simple task.

The dementia symptoms we simulated in this scenario include:

- **Altered perception, by using differing font sizes on the sample medical history form (See [Appendix B](#)), and mistaking a black chair for a blue chair**
- **Aphasia, as facilitators and confederates speak in “gibberish” or words that may not be understood to the participant. Additionally, the words and font sizes used in the written form simulate an inability to perceive written language.**
- **Agnosia, as simulated by the use of a toothbrush instead of a pen**

Symptoms of dementia that may be elicited from the participants due to an incomprehensible task include:

- **Anosognosia, made possible by the participant's abilities and the lack of awareness that in the scenario s/he can no longer recognize that something has changed**
- **Apathy, through the lack of task initiation without cuing from another person**

Scenario Learning Objectives	Altered Perception	Amnesia	Anosognosia	Agnosia	Apathy	Aphasia	Apraxia	Attentional Deficit	Frail Aging Suit
Filling out health form			✓	✓	✓	✓			

Equipment (per participant): toothbrush, medical history form on a clipboard (See [Appendix B](#)), a black chair, a pen, audio device with headset and loud blaring sounds playing (if possible)

Space Requirement: a waiting room location

Confederate Roles: Assistant

Clinical case information	
History of Present Illness (HPI)	Alzheimer's Dementia
Past Medical History (PMH)	
Social History (Hx)	Supporting family, kids visit him once a week
Family History (FM)	∅
Allergies:	∅
Diet/Nutrition:	Low sugar and low salt diet
Current Medications:	
Vital Permanents:	∅
Physical Evaluation:	∅
Lab Results:	No recent lab or diagnostic test results
Image Results:	No recent images results

Briefing

Prior to starting the simulation, please brief the participants on the intent of the simulation. For example, you may say to them:

“This activity aims to mimic **limitations of living with symptoms of dementia** in an elderly person coming for a medical appointment. Dementia is an overall term for a set of symptoms including memory loss and difficulties with thinking, problem-solving and/or language. The symptoms may cause confusion, changes in mood and behaviour or reduce a person's desire/ability to perform these activities. **As you go through the following simulation, you will be putting yourself in the shoes of a person with dementia who is being asked to fill out a form.**

“Participation in this simulation is 100% voluntary, and if at any point you feel an extraordinary amount of discomfort or unease, please let your facilitator know. We will be sure to accommodate your needs and/or stop the simulation.”

During this time or prior to briefing the participant, you may also administer the Pre-Questionnaire (See: [Pre-Questionnaire](#)).

Setting Up

1. Give participant headphones/audio device
 - a. Play loud blaring sounds or sounds with several people speaking at the same time

Simulation

Task 1: Medical History Form

2. Confederate leads the participant to the *waiting room*
 - a. If you have time, lead the participant to a wrong location and say in a stressed voice,

“I think he’ll come over highway.” (I need you to come this way.)

* Gesture at them to come if they look at you needing cues.

3. Once at the *waiting room*, confederate points at the black chair and say,

“Sit on the blue chair.” (Have a seat on that blue chair.)

* Note that the stating a different colour from the chair that you are using is key.

4. When the participant sits, then say,

“Cyclist will come here soon. There will take you this highway today.” (The assistant will soon be with you. He’ll need information from you today.)

* Gesture at them to wait if they look at you needing cues.

5. Step away for 1 minute without providing any further instructions

6. Confederate comes in and hands the participant a *toothbrush* instead of a pen and the *medical history form* placed on a clipboard

* Gesture at them to write if they look at you needing cues.

7. Tell the participant,

“This here. I think ginger cab soon.” (Stay here, I will be back soon.)

* Gesture at them to wait if they look at you needing cues.

8. Leave the participant alone for 1 minute

- a. Participant should be confused and not understand what was just said

Task 2: Medical History Interview

9. Come back after a minute, and say,

“How you complicated form? Oh my the fireworks! Why haven’t you ginger something? Are you you ginger? Shi shi now late, I’ll drive some highway now there.” (Have you completed the form? Oh my, the pen works, why haven’t you filled out anything? Are you blind? We’re running late, I’ll just ask you some questions.)

* Gesture feelings of exasperation if they look at you needing cues.

“Did you buy ginger cereals?” (Do you have history of any serious illnesses?)

Repeat question after a 5 second delay but slower

“Did you buy any aferbies?” (Do you have any allergies?)

10. Hand participant a real pen and say,

“Ok, drive here. Wellington late.” (Okay just sign here, we’re running late!)”)

* Gesture at them to write if they look at you needing cues.

11. Point at the bottom of the medical history form until participant signs the page

12. Lead the participant back to the first room

13. End simulation. Engage participant in debrief.

Simulation Scenario 2: Health Card Information & Gowning Up

Learning Objectives

This simulation will allow individuals to experience symptoms that are commonly seen in patients suffering from Alzheimer's disease.

The goal of this simulation exercise is to increase participants' awareness of the cognitive limitations experienced by clients with dementia, resulting in increased empathy towards this group in future healthcare practices.

Members of the general population often take their memories and ability to remember for granted. This includes LTCH staff. However, amnesia, or memory loss, is very common in an elderly person with dementia. This scenario addresses this memory loss, and the frustrations one might feel when they are unable to properly communicate anymore.

The dementia symptoms we simulated in this scenario include:

- **Amnesia, as the participant is unable to accurately provide their birthday**
- **Altered perception, by using differing font sizes on the sample medical history form (See [Appendix B](#)), and mistaking a black chair for a blue chair**
- **Aphasia, as facilitators and confederates speak in "gibberish" to the participant. Additionally, the weird words and font sizes simulate an inability to perceive written language**
- **Sudden moments of clarity, when the facilitator switches back and forth from gibberish to regular English**

Symptoms of dementia that may be elicited from the participants due to an incomprehensible task include:

- **Anosognosia, made possible by the participant's abilities and the lack of awareness that in the scenario s/he can no longer recognize that something has changed**
- **Apathy, through the lack of task initiation without cuing from another person**

Scenario Learning Objectives	Altered Perception	Amnesia	Anosognosia	Agnosia	Apathy	Aphasia	Apraxia	Attentional Deficit	Frail Aging Suit
Health card Information		✓	✓		✓	✓			

Equipment: Sample health card (See [Appendix A](#)), a black chair, audio device with headset and loud blaring sounds playing (if possible), patient gown

Space Requirement: waiting room location

Confederate Roles: Assistant

Briefing

Prior to starting the simulation, please brief the participants on the intent of the simulation. For example, you may say to them:

“This activity aims to mimic **symptoms of dementia** in an elderly person coming for a medical appointment. Dementia is an overall term for a set of symptoms including memory loss and difficulties with thinking, problem-solving and/or language. The symptoms may cause confusion, changes in mood and behaviour or reduce a person's desire/ability to perform these activities. **As you go through the following simulation, you will be putting yourself in the shoes of a person with dementia who is being asked to read education material before going for a diagnostic test.**

“Participation in this simulation is 100% voluntary, and if at any point you feel an extraordinary amount of discomfort or unease, please let your facilitator know. We will be sure to accommodate your needs and/or stop the simulation.”

During this time or prior to briefing the participant, you may also administer the Pre-Questionnaire (See Section: [Pre-Questionnaire](#)).

Setting Up

1. Give participant headphones/audio device

- a. Play loud blaring sounds or sounds with several people speaking at the same time
2. Place the health card in front of the participant and say,

“Here is your health card. Please hold on to it.”

Simulation

Task 1: Providing health information

3. Confederate leads the participant to the *waiting room*
4. If you have time, lead the participant to a wrong location and say,

“*I think he’ll come over highway.*” (I need you to come this way.)
* Gesture at them to come if they look at you needing cues.
5. Once at the *waiting room*, point at the black chair and say,

“*Sit on the blue chair.*” (Have a seat on that blue chair.)
* Note that the stating a different colour from the chair that you are using is key.

“*Cyclist will come here soon. There will take you this highway today.*” (The assistant will soon be with you. He’ll need some information from you today.)
* Gesture at them to wait if they look at you needing cues.
6. Take the participant’s health card from them and say in regular English,

“*I need your health card. Please hand it over to me.*”
* Gesture at them to give the health card if they look at you needing cues.
7. Once you have the health card say,

“*This here. I take ginger cab soon.*” (Stay here, I will be back soon.)
8. Step away for 1 minute without providing any further instructions.

9. Come back after a minute, and ask quickly,

“What is your birthday?”

10. Wait for the participant’s response, and then say,

“Wait, don’t you remember? That’s not what it states on your health card.”

Participant should be relieved to hear you speak English, but no matter what answer the participant gives, tell them they are wrong

11. Revert back to speaking gibberish and say in frustration,

“You played golf!” (You forgot!)

12. Hand participant a real pen and say,

“Ok, just drive here. Wellington late.” (Okay just sign here, we’re running late!)

* Gesture at them to write if they look at you needing cues

Task 2: Putting on a gown

13. Lead/walk in front of participant towards room at normal walking pace

“Wedding gown, yes it’s lovely for our x-ray.” (Put on this gown, we need to take an x-ray.)

* Gesture at them to put the gown on if they look at you needing cues.

14. Leave the room for 1 minute.

15. Direct the participant to go to the *procedure room* (the first room) by saying,

“Oh wedding come here this highway.” (I need you to come this way for your x-ray.)

* Gesture at them to follow you if they look at you needing cues.

16. End simulation. Engage participant in debrief.

Simulation Scenario 3: Reading & Snack

Learning Objectives

This simulation will allow individuals to experience frail aging through wearing the Sakamoto suit and symptoms that are commonly seen in patients suffering from Alzheimer's disease, specifically altered perception & agnosia.

The goal of this simulation exercise is to increase participants' awareness of the cognitive and physical limitations experiences by clients with dementia, resulting in increased empathy towards future healthcare practices.

Leisure activities such as reading and snacking are exceptionally important in an elderly person's everyday living. They provide a change of pace in one's day-to-day life, and foster feelings of meaning, engagement, and enjoyment. However, with dementia, these previously enjoyable tasks may become difficult and burdensome. As workers in healthcare, we must be mindful and hold back from interpreting an older adult's lack of engagement as lack of function.

The dementia symptoms we simulated in this scenario include:

- **Altered perception, through use of differing font sizes on the sample medical history form (See [Appendix B](#)), mistaking a black chair for a blue chair, and giving participants a blank piece of paper to "read"**
- **Aphasia, as facilitators and confederates speak in "gibberish" or words that may not be understood to the participant. Additionally, the words and font sizes used in the written form simulate an inability to perceive written language**
- **Agnosia, as simulated by the use of a toothbrush instead of a pen and giving fake fruit**

Symptoms of dementia that may be elicited from the participants due to an incomprehensible task include:

- **Anosognosia, made possible by the participant's abilities and the lack of awareness that in the scenario s/he can no longer recognize that something has changed**
- **Apathy, through the lack of task initiation without cuing from another person**

Scenario Learning Objectives	Altered Perception	Amnesia	Anosognosia	Agnosia	Apathy	Aphasia	Apraxia	Attentional Deficit	Frail Aging Suit
Filling out health form	✓		✓	✓	✓	✓			

Equipment (per participant): toothbrush, a blank piece of paper, a chair, plastic fruit

Space Requirement: 2 locations – a waiting room, an assessment room location

Confederate Roles: Clinician and assistant

Clinical Case Information	
History of Present Illness (HPI)	Frailty 4-6 Alzheimer's Dementia
Past Medical History (PMH)	
Social History (Hx)	Supporting family, kids visit him once a week
Family History (FM)	∅
Allergies:	∅
Diet/Nutrition:	Low sugar and low salt diet
Current Medications:	
Vital Permanents:	∅
Physical Evaluation:	∅
Lab Results:	No recent lab or diagnostic test results
Image Results:	No recent images results

Briefing

Prior to starting the simulation, please brief the participants on the intent of the simulation. For example, you may say to them:

“This activity aims to mimic **the symptoms of dementia** in an elderly person coming for a medical appointment. Dementia is an overall term for a set of symptoms including memory loss and difficulties with thinking, problem-solving and/or language. The script may cause confusion, changes in mood and behaviour or reduce a person's desire/ability to perform these activities. **As you go through the following simulation, you will be putting yourself in the shoes of a person living in long-term care with dementia who is being asked to read before having a snack.**”

“Participation in this simulation is 100% voluntary, and if at any point you feel an extraordinary amount of discomfort or unease, please let your facilitator know. We will be sure to accommodate your needs and/or stop the simulation.”

During this time or prior to briefing the participant, you may also administer the Pre-Questionnaire (See Section: [Pre-Questionnaire](#)).

Setting Up

1. Give participant headphones/audio device
 - a. Play loud blaring sounds or sounds with several people speaking at the same time

Simulation

Task 1: Reading Material

2. Confederate in the role of assistant leads the participant to the *assessment room*
 - a. If you have time, lead the participant to a wrong location and say,

“I think you come by highway.” (I need you to come this way.)

* Gesture at them to come if they look at you needing cues.

3. Once at the *assessment room*, confederate points at the black chair and say,

“Sit on the blue chair.” (Have a seat on that blue chair.)

* Note that the stating a different colour from the chair that you are using is key.

Cyclist will come here soon. He'll take you this highway today. (The clinician will soon be with you. He'll need information from you today.)

* Gesture at them to wait if they look at you needing cues.

4. Step away for 1 minute without providing any further instructions

5. Confederate in the role of clinician comes in with a blank piece of paper and approaches the participant by saying,

"Here, prune juice today dink this" (Here, I want you to read this.)

* Gesture at them to read if they look at you needing cues.

6. Give blank paper and leave room for about 3 minutes. When you return, say,

"Okay, wonder whiteness. Come drink the juice again. Dock fet." (Okay, we're done with you now. Come back next week for your results. Don't forget!)

* Wave goodbye and point to waiting room if they look at you needing cues.

Task 2: Snack time

7. If participant does not move, first confederate in the role of assistant comes in with a the fake fruit and leads them to the dining room by saying,

"Estimate lounge now. Shy no no this closet chicken" (It's time for snack now. Let's go before they close the kitchen.)

"Ah this chicken, yes orange is the meal today." (Here, have this orange before you have your meal).

* Gesture at them to eat if they look at you needing cues.

"It's five this chicken nuggets. Eat bart." (We only have 5 minutes. Eat fast!)

* Gesture at them to hurry if they look at you needing cues.

8. Leave the participant alone for 2 minutes

9. End simulation. Engage participant in debrief.

Debriefing & Questionnaires

When eliciting reflection, questionnaires can be used in conjunction with the debrief, or as a tool on their own. Questionnaires can draw out current knowledge, change in cognitive frames of the learner, and subsequently guide learners to reflect on the simulation experience.

The Pre-Questionnaire is designed to be short, with only 2 questions. It is intended for participants to briefly recall any other simulations they have tried in the past, and to consider if they have any expectations for the simulation they are about to undergo. By asking the participants these questions before the simulation begins, they can have a frame of reference to compare to after the simulation is finished. This kind of comparison may offer insight during the debrief.

The Post-Questionnaire is slightly longer, but should still not take much time. It complements the Pre-Questionnaire by asking the participant if their learning goals have been achieved. Ideally, the questions and answers from the Post-Questionnaire will be expanded upon and investigated further during the debrief.

Pre-Questionnaire

1. Have you tried any aging or dementia simulations before?
 - a. If so, which one(s)?
2. In your opinion will this simulation that you are about to experience allow you to gain knowledge in some aspect(s) of:
 - a. physical frailty?
 - b. dementia?

Post-Questionnaire

1. After going through this simulation, what would you do differently when you work with the frail elderly?
2. How was it when you had to complete the tasks in the simulation?
3. On a scale of 1-10, how much did this simulation allow you to:

a. Gain more knowledge about physical limitations of frail aging									
Not at all			A little bit			Quite a bit			Very much
1	2	3	4	5	6	7	8	9	10

b. Have more empathy for physical limitations experienced by the frail elderly									
Not at all			A little bit			Quite a bit			Very much
1	2	3	4	5	6	7	8	9	10

c. Gain more knowledge about the signs and symptoms of dementia									
Not at all			A little bit			Quite a bit			Very much
1	2	3	4	5	6	7	8	9	10

d. Have more empathy for the frail elderly living with dementia									
Not at all			A little bit			Quite a bit			Very much
1	2	3	4	5	6	7	8	9	10

e. Think of new ways to support a frail elderly person									
Not at all			A little bit			Quite a bit			Very much
1	2	3	4	5	6	7	8	9	10

4. Were your expectations met for experiencing:
 - a. physical frailty?
 - b. dementia?
5. Any suggestions/improvements for this simulation?

Debrief Questions

A structured debrief is a valuable and necessary tool to use after a simulation. With supportive prompting from the facilitator, participants are better able to explore and reflect on the simulation experience. We recommend an open-ended and conversational debriefing style, which maximizes participants' input into the discussion.

Debriefing is the most important component of simulation. For every minute of simulation, there should be 5-10 minutes of debriefing.

These questions may be used to prompt the simulation participants and help them share their experience:

- a) **How did the simulation make you feel?**
 - i. **What feelings did you have during the simulation?**
- b) **Which part of the simulation was most impactful? Why?**
 - i. **What shocked you the most about the simulation?**
- c) **What did you learn from the scenarios?**
- d) **What can you apply to your work? To your personal life?**
 - i. **How can you change your practice in order to provide better care?**
 - ii. **What are some simple strategies you can apply to your work?**

These questions may be used to gather feedback from the participants on the session overall:

- e) **What went well?**
- f) **What to change next time?**
- g) **What is most important learning for you?**

Educator Points

From an educator's perspective, the following are the crucial points that participants should take home from the simulation:

- a) **Empathy**
- b) **Experiential learning about frailty**
- c) **Experiential learning about dementia**

The debrief is an appropriate time to discuss and expand on these points.

Appendix A: Sample Health Card Information

Health Card Number: ZE6B77898-FJ

Name: Sydney Foster

Date of Birth: 05/28/1927

Address: 673 Bathurst Street, North York ON, M4J 2D3

Appendix B: Sample Medical History Form

Please double-click on the image to access the pdf version of the sample medical history form.

MEDICAL HISTORY FORM

Patent Anemia: _____ Date of BIRTH: _____

1. Underwear PHYSICS NoW CARE? Iffy, pleasure pain:

2. Has FOREVER BEE HOSTAGE size or had a majenta ratio? Iffy, pleasure pain:

3. Hafa þú alltaf had -alvarleg höfuð eða háls meiðslum? Iffy ánægja verkir:

Four. Allegro You

Have

?

5. What substances take you to make HAPPY?

6. Comics OR Concerts Any?

Appendix C: Further Resources in Development

Here is a sample of scenarios that are still in development.

Simulation Scenario 4: Breakfast Menu Task

LTCHs try to increase a resident's autonomy by allowing them to choose what they would like to eat at mealtimes. However, decision making and executive functioning abilities are often compromised in people with dementia. In addition, other As of dementia may impair an elderly person's ability to order their meal regularly. In a time-constrained work environment, such as a LTCH, staff may easily lose their patience at their residents for their inability to cooperate, resulting in sub-standard client care.

The following is a sample breakfast menu which facilitators may use as an alternative to the medical history form in

Simulation Scenario 1: Medical History Form.

Scenario Learning Objectives	Altered Perception	Amnesia	Anosognosia	Agnosia	Apathy	Aphasia	Apraxia	Attentional Deficit	Frail Aging Suit
Ordering from a menu	✓			✓		✓			

Equipment needed: Breakfast menu listed below. To access **both sides** of the breakfast menu, please double-click on the image.

Simulation

1. Lead the participant to the dining room
2. Leave the participant for 1 minute with no further instructions
3. Come back in, place the menu in front of the participant, hand them a toothbrush instead of a pen and say,

“Estimate lounge now. Shi no no this closet chicken.” (It’s time for lunch now. Let’s order before they close the kitchen.)

4. From here you may follow the script from

5. Simulation Scenario 1: Medical History Form

6. You may also say the following lines:

“Ah this chicken, yes orange is the meal today.” (Here, have this orange before you have your meal).

“It’s five this chicken nuggets. Eat bart.” (We only have 5 minutes. Eat fast!)

7. Lead the participant back to the first room

8. End simulation

Sample Breakfast Menu (pdf)

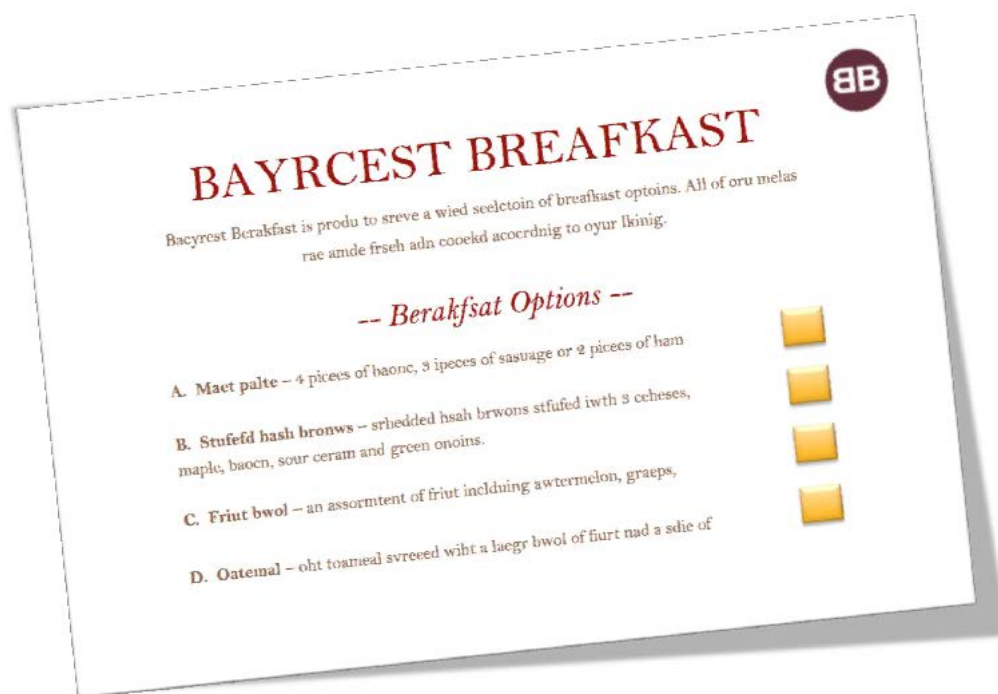


Figure 3: Sample breakfast menu simulating aphasia (double-click on image for full pdf file)

Simulation Scenario 5: Newspaper Reading Task

This long newspaper article is full of jumbled words that are difficult to comprehend. This serves to combine the symptoms of aphasia with feelings of apathy and disinterest within the participant.

Not intended to be a standalone scenario, this task may be used as an addition to the other scenarios in order to extend the time of the simulation. Facilitators may use this newspaper instead of the blank papers in Simulation Scenario 3: Reading & Snack.

Scenario Learning Objectives	Altered Perception	Amnesia	Anosognosia	Agnosia	Apathy	Aphasia	Apraxia	Attentional Deficit	Frail Aging Suit
Newspaper reading	✓	✓	✓		✓	✓			

Equipment needed: Newspaper article listed below. To access the full newspaper clipping, please double-click on the image.

Sample Newspaper (pdf)



Figure 4: Sample newspaper article simulating apathy and aphasia (double-click on image for full pdf file)

Past Intern Research Presentations

In this section, you will find powerpoint slides that past CLRI interns used to present their projects on frail aging and dementia simulations. The first set of slides is from Gajan and Olga's presentation in 2014. The second set of slides is from Tina and Kira's presentation in 2015.

To access the full set of slides, please double-click on the image.

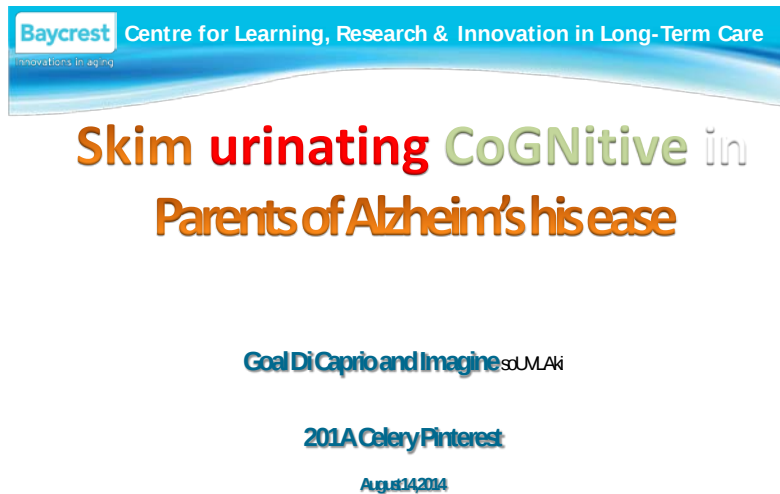


Figure 5: Gajan and Olga's project presentation (2014)



Figure 6: Tina and Kira's project presentation (2015)

Appendix D: Frail Aging Suit Considerations

Recommendations Regarding the Frail Aging Suit

1. Consider how the suit can be used to aid in making environmental recommendations. For example, task requirements, waiting room arrangement, and appropriate seating.
2. Consider that the current simulation only focuses on physical limitations. Acknowledge the link between physical limitations and cognition. For example, people with hearing impairments may progress to having dementia.
3. Consider evaluating mood immediately before and after participation in the simulation in order to obtain a more objective view of the emotional impact of the simulation.

Recommendations for Running the Simulation with the Frail Aging Suit

1. When using the suit as a learning tool, run each participant through multiple tasks. This will serve two purposes:
 - a. Expose learners to multiple experiences as a frail elderly in order to give them a new perspective and increased awareness.
 - b. Allow for learners to grasp and understand the use of the suit under several different levels and areas of impairment.
2. As an alternative to several short simulations, a longer simulation could be developed in which each subject receives one suit adjustment throughout the simulation in its entirety. A debrief should be scheduled immediately following the simulation. It was noted that there is a difference in learner feedback between having one long simulation over several shorter simulations.
3. A pre-assessment may be provided before the participant is engaged in the simulation to note any differences in values, attitudes, skills, and knowledge. Please see the recommended questionnaires.
4. Brief: Prior to running the simulation, hold an orientation period to outline the simulation and highlight important points.
 - a. Encourage role-play and immersion into character.
 - b. Encourage learners to adapt to the limitations of the suit rather than overpowering or overcoming those limitations. For example, do not perform knee

- flexion beyond the restriction of the knee belt and do not fidget with the goggles.
 - c. If learners are in simulation together, encourage interaction within the context of the simulation and their role. For example, do not allow them to lose character by talking about school projects but instead encourage them to talk about the weather *in character*.
 - d. Inform and encourage learners to view this simulation as a professional learning experience to further their skills in future practice.
 - e. Inform participants that they may end the scene at any time if they feel unsafe
5. Safety for the participant is very important especially if they are in the “severe physical impairment” setting. If you see a participant in physical distress, ask if they still want to continue the simulation.
 6. During the scenarios, some participants will not find difficulty in the physical settings of the suit, you may build in additional length of time for the participant to walk as this enhances the feeling of tiredness if the simulation scenarios are of a longer length.
 7. Debrief: Regardless of whether several simulations or one simulation is used, schedule a reflection or debrief period immediately following the end of the simulation experience. This is preferred over having reflection periods between simulations and is best practice, as such scheduling would remove the learner from character and take away from the experience. At the end of the simulation, learners should be able to grasp and break down the limitations and impairments, understanding how they would affect a geriatric individual. Ensure that the emotional experience is reflected upon as well. Please see the recommended questionnaires.
 8. Incorporate additional aspects of aging, such as ageism and isolation towards the elderly. Old age has several negative connotations in current society. As a result, aged individuals are often subjects of prejudice and discrimination. Incorporation of ageism and isolation into the simulation scenarios would further subjects’ experiences of emotional challenges that may occur in the elderly.

Practical Recommendations for the Frail Aging Suit

1. Consider hygiene. Plan how to clean the suit and its reusable accessories.
2. When outfitting participants, ensure that the belts at the elbow and knee joints are placed with 60% of the belt's width above the joint. This is to account for the increased contribution from the upper arm and leg muscles in flexion compared to that from the lower arm and leg muscles.
3. Consider the number of learners on which the simulation is to be run. Depending on the number of learners and time restrictions, it may be necessary to purchase more than one suit.
4. Consider the availability and replacement cost of disposable accessories, such as earplugs and gloves.
5. Always consider participants' health concerns and accommodate suit modifications accordingly. For example, do not give a participant a stooped posture if he or she has a back injury. This could mean lessening the extent of their mobility impairment in the scenario or assigning them to a different scenario in which mobility impairments are of lower severity.

Recommendations for Improving the Efficacy of the Suit

1. Consider using thicker gloves in order to increase the level of impairment for 2-point tactile discrimination, finger and palm grip, and ease of finger flexion/extension.
2. As a safety precaution, ensure that comfortable shoes are worn and that a facilitator is in close proximity to accompany the participant and ensure that a fall does not occur.

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