

Behavioural Supports Ontario-Dementia Observation System[®]



**Skillfully and Confidently Use the BSO-DOS[®]
to Inform Behavioural Assessment and
Individualized Care Planning**



Behavioural Supports Ontario
Soutien en cas de troubles du comportement en Ontario

Suggested speaking points:

- Hello, I'm _____ and my role is _____
- Thank-you for taking the time out of your busy day to join. We will be spending 20-30 minutes together.
- This is meant to be an interactive session. The best way to learn together is through sharing of experiences.
- My goal is for everyone (including myself) to leave with a few added skills and increased confidence in using the Behavioural Supports Ontario-Dementia Observation System[®], which is known as the BSO-DOS[®].

Notes to facilitator:

- *The timing for this session will depend on the availability of the participants and the amount of discussion that is encouraged/generated.
- *If you have a sign in sheet, record names now.



BSO-DOS[®]

- A reliable direct observation tool that provides objective data about a person's behaviour every thirty minutes for 24-hours over five consecutive days
- An essential clinical tool in behavioural assessment and individualized care planning for persons living with dementia

The image shows a sample of the BSO-DOS Data Collection Sheet. It is a structured form for recording observations. At the top, it includes the BSO-DOS logo and title. Below the title, there are sections for 'Background Information' and 'Instructions'. The main part of the form is a large grid with columns for 'Day' (1-5) and 'Time' (00-23). The rows are organized by 'Hour' (00-23). Each cell in the grid is designed for recording specific behavioral data. To the right of the grid, there are additional sections for 'Observer Information', 'Assessment', and 'Summary'. The form is labeled 'BSO-DOS[®] DATA COLLECTION SHEET' and 'PRE-RELEASE VERSION #2'.

Suggested speaking points:

- The BSO-DOS[®] is a standardized version of the DOS, the Dementia Observation System. It was created in 2019 and updated in 2025.
- The BSO-DOS[®] is a reliable direct observation tool that provides objective data about a person's behaviour every thirty minutes for 24-hours over five consecutive days.
- The information gathered over these 5 days is extremely valuable in understanding the meaning of behaviour and to find individualized care approaches to reduce or eliminate responsive behaviours.
- Therefore, the BSO-DOS[®] is an essential tool in your best practice toolkit for behavioural assessment and individualized care planning for persons living with dementia.

The BSO-DOS[©] is Used to:

- ✓ Identify behavioural patterns, trends and contributing factors associated with responsive behaviours
- ✓ Develop tailored non-pharmacological approaches to address unmet needs
- ✓ Evaluate the outcomes of non-pharmacological approaches
- ✓ Measure the impact of medications

Suggested speaking points:

- The BSO-DOS[©] is used to:

- 1) Identify behavioural patterns, trends and contributing factors associated with responsive behaviours
- 2) Develop tailored non-pharmacological approaches to address unmet needs
- 3) Evaluate the outcomes of non-pharmacological approaches
- 4) Measure the impact of medications

- Therefore, a BSO-DOS[©] should be completed when there is a need to understand and identify behavioural patterns, frequency, duration and level of risk. This includes when there is a change in behaviour, after a transition or move, a medication adjustment or to evaluate the outcome of a new strategy or approach.

Your Experience in Using the BSO-DOS[©]

How familiar are you with the BSO-DOS[©]?

- ☐ This is your first time hearing about it
- ☐ You have heard of it, but have never used it
- ☐ You use it occasionally
- ☐ You use it often



For those that have used the BSO-DOS[©], what parts of the tool have you completed?

- ☐ The Background Section
- ☐ The Data Collection Table
- ☐ The Analysis and Planning Section



Suggested speaking points:

- I would like to hear about your experience in using the tool.
 - Feel free to raise your hand for these questions.
 - How familiar are you with the BSO-DOS[©]? - Read through options on the slide.
 - For those that have used the BSO-DOS[©], what parts of the tool have you completed?
- You can put your hand up for more than one answer - Read through options on the slide.

Your Experience in Using the BSO-DOS[©]

Thank-you for the role that you have played in completing the tool!



What benefits have you seen in using the BSO-DOS[©]?

Suggested speaking points:

- In whatever role you have played in completing the tool - Thank-you! Everyone's role is valuable and needed in ensuring it is clinically valuable. This is truly a tool that relies on teamwork.
- Would anyone like to share benefits that you have seen in using the BSO-DOS[©]? Is there anything that you learned about a person using the tool that informed successful care strategies?



Suggested speaking points:

- We will now watch a video about the BSO-DOS© that reviews details on how to complete the tool.
- The video is just over 6 minutes.

Suggested speaking points after playing the video:

- Are there any questions that you have based on the video?

Notes to facilitator:

*Hyperlink to video is available in the PDF slide deck by clicking on the computer image. It is also available here:

<https://vimeo.com/1087762553/d89d507682>

*After the video is an ideal time to hand out copies of the User Guide to participants.

*See Frequency Asked Questions within the Resource Manual as a resource to respond to questions.

* If you are not able to play the video in the session you can ask participants to view the video at another time.

Mrs. Cheng



Suggested speaking points:

- Now that we have met Mrs. Cheng in the video, we will learn more about her and have a bit more time to find out how the data collected in the BSO-DOS® informed person-centred strategies to reduce her responsive behaviours.
- Mrs. Cheng (a pseudonym) is an 86 year old woman who has recently moved from her daughter's home to a long-term care home. She has a diagnosis of mixed dementia and now requires a wheelchair as she can no longer walk. She is able to engage in simple conversation, mostly using one or two words. Through collecting personhood information, the team learns that she has a large family, and her home was often the central meeting place. She loved to cook and her specialty was homemade dumplings.
- The clinical team noticed there are many times in the day when Mrs. Cheng calls out, yelling for help - "Help! Help!" When they go to assist her, they struggle to figure out what it is that she needs.

Mrs. Cheng

Step 1 Background (Complete prior to Data Collection Sheet)

1. a) Check the reason(s) for completing BSO-DOS®:

- | | | |
|--|--|---|
| <input checked="" type="checkbox"/> Baseline/Admission | <input type="checkbox"/> Evaluation of a new strategy/approach | <input checked="" type="checkbox"/> New behaviour: <u>calling out</u> |
| <input type="checkbox"/> Transition/Move | <input type="checkbox"/> Adjustment of medications | <input type="checkbox"/> Other: _____ |
| <input type="checkbox"/> Change in behaviour | <input type="checkbox"/> Support for a referral/transfer | |

b) BSO-DOS® start date: 10/06/2025 BSO-DOS® stop date: 14/06/2025

Section 1 completed by (print name): Nellie Wilkins

Signature: Nellie Wilkins



Suggested speaking points:

- They decide to complete a BSO-DOS® to better understand the timing, context, and any patterns around these times of distress.
- They first complete is Step 1, the Background section. As she just moved into long-term care, they check off 'Baseline/Admission' and since the family reported that she was not calling out at home, they also check 'New behaviour' and note 'calling out' as the specific behaviour.



BSO-DOS[®] DATA COLLECTION SHEET

Name: Yun Cheng
DOB (dd/mm/yyyy): 14/09/1939
HCN: 1111-111-111-MB
Other ID:

Observed Behaviours (For #3-8, check specific behaviours as you observe)

1 Sleep

2 Awake/Alert

3 Social Positively engaged
☐ Conversing ☐ Hugging ☐ Singing
☐ Engaging in activity ☐ Kissing ☐ Smiling
☐ Hand-holding ☐ Laughing ☐ Other:

4 Vocal Vocal expressions (repetitive)
☐ Asking questions ☐ Humming ☐ Requests
☐ Crying ☐ Moaning ☐ Sighing
☐ Grunting ☐ Repeating words ☐ Other:

5 Motor Motor expressions (repetitive)
☐ Banging/rattling ☐ Fidgeting ☐ Rumaging
☐ Collecting ☐ Grinding teeth ☐ Trying to leave
☐ Disordering ☐ Pacing ☐ Other:
☐ Entering others' spaces ☐ Rocking

6 Sexual Sexual expression of risk
☐ Sexual comments/questions ☐ Self-pleasuring in others' presence
☐ Requesting sexual favours ☐ Sexual threats ☐ Unwanted touching
☐ Sexual gestures ☐ Forcing others into sexual acts
☐ Exposing genitals ☐ Other:

7 Verbal Verbal expression of risk
☐ Threatening remarks ☐ Screaming/yelling ☐ Threatening ☐ Other:

8 Physical Physical expression of risk
☐ Biting ☐ Kicking ☐ Self-injuring
☐ Choking others ☐ Pinching ☐ Spitting
☐ Grabbing ☐ Punching ☐ Throwing
☐ Hair pulling ☐ Pulling ☐ Other:
☐ Fisting/slapping ☐ Scratching

9 Other:
10 Other:

Context

A: Alone
 C: Personal Care (e.g. bathing, incontinent care, toileting)
 F: Family/visitors present
 L: Land/Room environment
 Q: Quiet environment

R: Expressions directed at Resident (patient/visitor)
 S: Expressions directed at Staff
 X: Other (yes, medical, yes, no)
 Y: Other

Data Collection Table Contributors

Observer	Observer	Observer	Observer
John W. King	John W. King	John W. King	John W. King
John W. King	John W. King	John W. King	John W. King
John W. King	John W. King	John W. King	John W. King
John W. King	John W. King	John W. King	John W. King

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Suggested speaking points:

- Then for 5 days the clinical team completes the Data Collection Sheet.
- This involves the contributions of several point-of-care team members including personal support workers, nurses, and allied health professionals who ensure observations are recorded every 30 minutes. This is a significant commitment of time, but this information is key to understanding Mrs. Cheng and finding approaches and strategies to decrease her distress.
- After the 5 day observation period, a team member highlights the data accordingly to the colour-coded legend.
- Does anything stand out to you about the data that is recorded on the Data Collection Sheet?

Notes to facilitator:

- *If no one shares what stands out to them, here are some possible items to note:
- Mrs. Cheng's repetitive vocal expressions typically occur when she is alone or during personal care
- At times Mrs. Cheng's vocal expressions escalate into verbal and physical expressions of risk
- Mrs. Cheng has very little positive engagement throughout the day
- Generally, Mrs. Cheng sleeps well at night - there was one disrupted night

Step 3 Analysis and Planning (Use the completed Data Collection Sheet)

3. a) Highlight the numbers on the Data Collection Sheet according to the colour-coded legend in order to identify patterns.

b) Use the table below to calculate how often per day the behaviour(s) of interest occurred (not every row needs to be calculated).

	Total the blocks for each day (Add up the number of blocks for each category per day)						Total the ½ hour blocks (Add up the number of blocks for each category over 5 days)		Calculate the average number of 1-hour blocks per day (Divide the total blocks by 10. Hint: move the decimal one space left.)	Concerns		
	Day 1	Day 2	Day 3	Day 4	Day 5					Frequency	Duration	Risk
1 Sleeping	20	15	22	24	20	=	101	+10	10.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2 Awake/Calm	22	22	13	14	20	=	91	+10	9.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3 Positively Engaged	3	3	1	3	3	=	13	+10	1.3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4 Vocal Expressions	3	8	9	6	4	=	30	+10	3.0	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
5 Motor Expressions	1	2	2	1	1	=	7	+10	0.7	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6 Sexual Expression of Risk						=		+10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7 Verbal Expression of Risk	0	1	3	0	1	=	5	+10	0.5	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8 Physical Expression or Risk	0	0	1	0	0	=	1	+10	0.1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9						=		+10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10						=		+10		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Table completed by (print name): Nelle Wilkins

Signature: Nelle Wilkins

Suggested speaking points:

- Then a team member calculates the quantitative data using the analysis table.
- Does anything stand out to you about these numbers?

Notes to facilitator:

- *If no one shares what stands out to them, here are some possible items to note:
 - Mrs. Cheng's time spent being positively engaged is quite low at only on average 1.3 one hour blocks per day
 - Vocal expressions are the most common responsive behaviour

PRE-RELEASE VERSION #2
NOT FOR CLINICAL USE

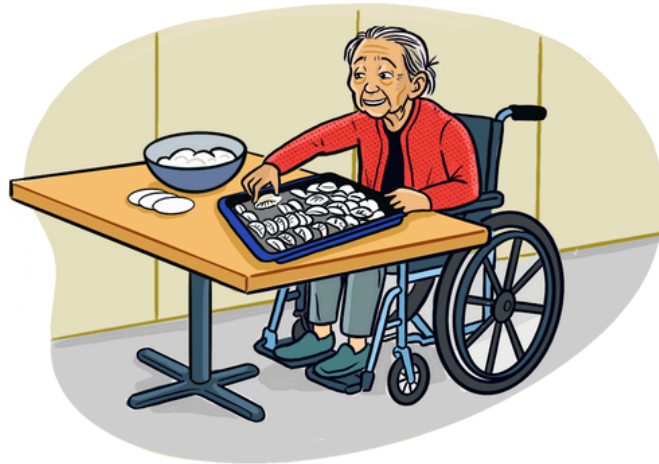
3. a) Highlight the numbers on the Data Collection Sheet according to the colour-coded legend in order to identify patterns.
b) Use the table below to calculate how often per day the behaviour(s) of interest occurred (not every row needs to be calculated)

Table completed by (print name): Nelle Wilkins

Signature: Nellie Telukin

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Mrs. Cheng



Suggested speaking points:

- In collaboration with the family, the team make the following plans based on what they learned from the BSO-DOS©:
- Pain medication to be administered as a scheduled dose in the evening, rather than prn, to alleviate pain and promote a restful sleep. Pain to be assessed each shift.
- Team members to turn on radio in room at 7:30 in the morning, as this is when Mrs. Cheng often starts to call out upon waking.
- The team will work to promote meaningful activities that align with Mrs. Cheng's personhood information. Specifically, to promote a sense of home and purpose, the team to trial a new activity whereby they provide Mrs. Cheng with white, non-toxic playdough to simulate dumpling dough. After each meal, after the tables are cleared, a team member is to provide Mrs. Cheng with the playdough and a tray from home that she previously used for dumpling making. Family members plan to visit her during these times to make the dumplings together.

The team decides to repeat the BSO-DOS© for 5 days to measure the outcomes of these new approaches.

Progress Note

New Progress Note

Resident: Cheng, Yun

Type: Responsive Behaviours/Personal Expressions

Date: 15/06/2025 13:00

BSO-DOS® completed 10/06/2025 - 14/06/2025. Paper copy scanned to chart.

Summary of Analysis Table:

- Concerns identified in relation to frequency and duration of Vocal Expressions (3.0 blocks per day), frequency for Motor Expressions (0.7 blocks) and frequency for Verbal Expressions of Risk (0.5 blocks).

The BSO-DOS® data reveal the following:

- Repetitive vocal expressions typically occur when resident is alone – mostly the morning when she gets out of bed and after meal times.
- When resident has poor sleep the night before, these vocal expressions are more likely to escalate into verbal and physical expressions of risk.
- When resident is positively engaged, she expresses less responsive behaviours.
- On average, resident was positively engaged during 1.3 one-hour blocks per day.

Identified possible causes and contributing factors:

- It is stressful for resident to be alone. She is used to having a lot of family around.
- Resident sleeps better when she has pain medication at bedtime. This was not given the night she slept poorly.
- Resident may need more time engaged in activities that are meaningful.

Planned next steps:

- Writer to request MRP to change pain medication to a scheduled dose in the evening, rather than prn. Pain to be assessed each shift.
- Team members to turn on the radio in resident's room at 0730, as this is when resident often starts to call out.
- Team and family to promote meaningful activities. Team to trial a new activity whereby they provide resident with white, non-toxic playdough to simulate dumpling dough. After each meal, a team member to provide Mrs. Cheng with the playdough and a tray from home. Family members plan to visit her during these times to make the dumplings together.
- Care plan updated as per above.
- Writer will initiate another BSO-DOS® (17/06/2025 - 21/06/2025) to measure the outcomes of these new approaches.

Created By: Nellie Wilkins, RN



Suggested speaking points:

- Here is an example of a progress note that is written that documents what was learned through the BSO-DOS® and the planned next steps.

Challenges to Implementing the BSO-DOS[©]

What challenges does your team face in using the BSO-DOS[©]?

How might your team overcome these challenges?

What next steps are needed for your team to use the BSO-DOS[©] in an effective and valuable way?



Suggested speaking points:

- We know of the benefits in using the BSO-DOS[©], but we are also aware that there are challenges in completing the tool.
- Let's pause and have a discussion about the challenges that you face and solutions for these challenges.

Notes to facilitator:

*Read each question on the slide.

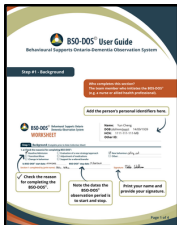
*Some of the challenges may be logistical in nature (e.g. not having access to highlighters; who takes the lead in completing the analysis and planning section), while others may be related to human resources (e.g. the challenge of observing and documenting every 30 min in the context of their other work responsibilities). In any challenge brought forward, acknowledge and validate the challenge, then help them to work through the second and third question to find solutions. Thank them for their efforts to find solutions to these real challenges as this shows their commitment to understanding responsive behaviours, identifying unmet needs, and ultimately finding individualized care strategies. Encourage them to continue to work as a team and with their leadership to find solutions.

Additional BSO-DOS[®] Resources Available



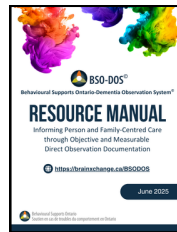
Fact Sheet

A two page document that provides quick facts about the BSO-DOS[®]



User Guide

A four page user-friendly guide for point-of-care team members to reference as they complete the BSO-DOS[®]



Resource Manual

A 50+ page resource that includes definitions, details for completing each section, frequently asked questions, and case studies



Video

A six minute educational video

+ MORE!



www.brainxchange.ca/BSODOS



Suggested speaking points:

- There are more tools and resources about the BSO-DOS[®] that are available on the BSO brainXchange website. These include a Fact Sheet, a User Guide, a comprehensive Resource Manual, the video that we just watched today, and even more resources. The website is noted here, as well as a QR code that will take you directly to the website.

Notes to facilitator:

*Hyperlinks to the resources and the BSO-DOS[®] website are available in the PDF slide deck by clicking on each item.

Questions?



Suggested speaking points:

- Do you have any final questions?

Notes to facilitator:

*See Frequency Asked Questions within the Resource Manual as a resource to respond to questions.

Contact Information

BSO Provincial Coordinating Office

✉ provincialBSO@nbrhc.on.ca
🌐 www.brainxchange.ca/BSODOS



Suggested speaking points:

- As we wrap up today, I want to say thank you for all that you do and for your commitment to those that you care for. Thanks especially for your contributions in completing the BSO-DOS®.
- I hope today helped each of you gain some added practical skills and increased confidence in using the BSO-DOS®.
- This slide provides contact information for the BSO Provincial Coordinating Office, but you can also contact me if you have additional questions. The best way to contact me is:

- Again, a sincere thanks for your time today.