Implementing the BSO-DOS[©] (Behavioural Supports Ontario-Dementia Observation System): Strategies for Your Team

brainXchange webinar

October 2019

Presenters:

Debbie Hewitt Colborne

Dr. Lori Schindel Martin





Objectives

- Provide an overview of BSO-DOS[©] and the collaborative work that led to its development.
- Describe the innovations within the new BSO-DOS[©] and its value within the multidisciplinary team.
- Describe the resources available to support the implementation and meaningful utilization of the BSO-DOS[©] (i.e. Start-Up Checklist, User Guide, Resource Manual and Instructional Video).
- Share strategies and lessons learned from clinical teams who have implemented the BSO-DOS[©].



Clinical Context

- Growing demographic of older persons.
- Growing number of individuals living with dementia.
- Individuals living with dementia may be responding to their environment with responsive behaviours/personal expressions due to stressors and unmet needs.
- Clinical teams are attempting to understand the meaning of the behaviours/expressions to tailor individualized, person-centred approaches.
- There are many tools available to measure responsive behaviours/ personal expressions.
- Reliable/accurate/consistent behavioural documentation remains a challenge.
- Clinical teams need many tools in their toolbox!





What clinical assessment tools inform your assessment and recommendations?

Aggressive
Behaviour Scale
(ABS) from the
RAI-MDS

Aggressive Behaviour Risk Assessment (ABRA) Antecedent
Behaviour
Consequence
Documentation

Cohen Mansfield Agitation Inventory (CMAI)

Neuropsychiatric Inventory (NPI)

Pittsburgh Agitation Scale

Dementia
Observation
System (DOS)
or
BSO-DOS©

Other Tools?



Direct Behaviour Observation The Gold Standard in Behavioural Assessment



What is direct behaviour observation?

Collecting information through observing/watching the individual in his or her usual environment.

Why is it direct observation important?

- Provides interprofessional team with objective and measurable data to identify patterns of behaviours
 ✓ Frequency, duration, precipitants and pattern of behaviours
- Provides systematic, theory-based measurement of specific behaviours targeted by an intervention

Limitations in Behavioural Assessment

- Retrospective reports = prone to errors in recall and provide little opportunity to identify the context of behaviours
- Rating scales = issues with inter-rater reliability and responsiveness to change, and are bias-prone:
 - ✓ Tendency to retrospectively over-report 'aggressive' behaviours and under-report 'non-aggressive' behaviours
 - ✓ Unclear retrospective reference periods and errors in recall.
- Retrospective rating scales have weak to moderate correlations to direct observation



DOS History

FEATURES

The Dementia Observational System: A Useful Tool for Discovering the Person Behind the Illness

Luri Schindel Martin

Mr. Br., who has Alzheimer's disease and had been living at home, has been admitted to your long term care facility because his family can no longer deal with him. His behaviour has changed dramatically ha doesn't along for more than 30 minutes at a time. when he's awake, he either continually looks for the door so he can get to work or shouts at his wife in a vain attempt to communicate his needs. The medicutions he has been taking to help him sleep only seem to confuse him more, he is beginning to have problems with Evaluation and opertinence, and he fell yeartenday.

How a Dementia Observational System

For congisers, a newly admitted resident with dementia often poses a challenge. Not knowing what constitutes a typical day for the resident, caregivers may reach inaccurate conclusions, which could lead to ineffective treatment approaches or modication regimens that trigget nega-

In these types of situations, a dementia observational system can be a asoful, tool. Caregivers can track a resident's behaviour, both positive and negative, over a number of days, in 24-hour blacks and from the emerging behavioural pattern, establish the resident's daily rhythm.

With a dementia observational system, conspirers dan determine the frequency and duration of his. Et's periods of next/eleep and periode of "busyness" or activity. ae well as the time when he is calm and agitated.

When a resident is aggressive or calls out frequently, staff generally perceive such events as listing much lonaer than they actually do. The measurable data that a dementia observational system generates will give caregivers a true picture of the length, intensity and frequency of this type of disruptive behaviour. The data can also be used to determine when, during a 24-hour cycle, interventions need to be concentrated; whether medicinal or psychopharmacological interventions are reducing the frequency of a behaviour, and to distinguish between those behaviours of speatest risk as compared to those that should be accommodated. For example, caregivers may group all challenging behaviours together and therefore lobel a resident "dangerous." When behaviour is measured objectively using an observational system, it is often the case that the frequency of overt physical aggression - a high-risk behaviour - actually occurs infrequently in a full 24-hour cycle. A more benign behaviour, such as pacing, may occur most frequently during each day, and interventions need to be directed at programming to accommodate this.

The Dementia Observational System What is it?

A dementia observational system is actually a document or written "picture" of how a resident occupies him or herself in a defined block of time. At Shalors Village Nursing Home, in Harsalton, Untario, the document that caregivers use is called a Resident Observation. Record | Chart 1). Caregivers select a "number" from the behavioural key, located at the top of the document, that best describes the resident during a 30-minute period and record it in the appropriate time day dot.

Two worksheet versions of the Resident Observation Record are used

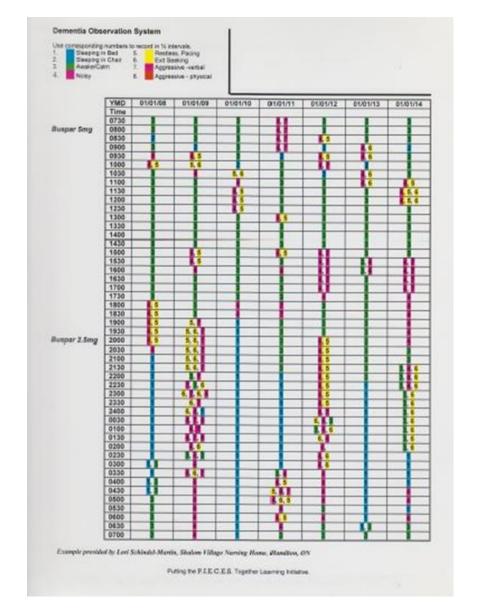
✓ The standardized workshort bus a behavioural key that tracks periods. of sleep, alert and calm wakefulness, noise making, restlessness, exitsocking and aggression, both serbal and physical. This version is most useful for new residents who have a scant behavioural history. Canopivers use the document to determine which behaviours might require some type of intervention.

✓ The individualized worksheet has a behavioural key mobling caregivers to describe as many as mgla well-defined behaviours; sleeping in bod sleeping in drain awake/calm; noisy; restless, pacing, exil-seeking, orgressive - serbil, and aggressive - physical. These target behaviours, which are written directly on the form, are used to capture the unique

Both workshoets use a numbering system to indicate degree of riskthe lower the number, the lower the associated risk, the higher the numbut, the higher the associated risk. Positive and neutral behaviours, such as "sleeping in bed," "sleeping in chair," and "awake/calm," should always appear as first-level behaviours on the key. Listing these positive and neutral descriptors on each behavioural key helps staff to see the full range of a resident's behavioural profile. If these types of descriptues are absent from the key, staff often leave portions of the 24-hour map blank or write their own descriptors in the squares. This results in data incor-

By including a resident's sleep status in the behaviouralikey, categivers can evaluate the success of a behavioural or psychopharmacological intervention directed at insomnia. This can also help staff determine if a new medication or a dosage increase is causing side effects, such as

Most importantly, the inclusion of positive descriptors, such as "avoke and caim," on the behavioural key, allows caregivers to determine the amount of time the resident engages in meaningful, positive behaviour versus negative behaviour. Soring the total picture can help set the tone so that caregivers avoid labelling and stereotyping the resident





Why Standardize the DOS?

- WHY?
- ✓ Common language and data analysis to support clinical decision-making and care planning for individuals expressing responsive behaviours related to dementia.
- ✓ Common tool within and across organizations and sectors.
- ✓ Benefit from innovations and clinical experience.



DOS Working Group

A project from the Behavioural Supports Ontario (BSO) provincial Knowledge Translation & Communications Advisory.

Who: An interprofessional team that have experience and expertise in working with the DOS

Purpose: To standardize the DOS to enhance the consistency, quality and validity of this measure for clinical decision-making and behavioural outcome tracking

When: Meeting monthly since January 2017

Coordination/Leadership: BSO Provincial Coordinating Office



DOS Working Group - Membership

- Dr. Lori Schindel Martin (Ryerson University)
- Debbie Hewitt Colborne (BSO PCO, NBRHC)
- Adriana Barel (St. Joseph's Health Care, London)
- Julia Baxter (St. Joseph's Healthcare Hamilton)
- Monica Bretzlaff (BSO PCO, NBRHC)
- Adriana Caggiano (RGP of Toronto)
- Lina DeMattia (Alz Society of Chatham-Kent)
- Gail Elliot (DementiAbility)
- Fernanda Fresco (NBHRC)
- Katrina Grant (Providence Care)

- Pam Hamilton (P.I.E.C.E.S.)
- Dr. Andrea laboni (Toronto Rehab Institute)
- Stephanie Jarvis (William Osler Health System)
- Teresa Judd (Central West LHIN)
- Dr. Lindy Kilik (Providence Care)
- Jodi Laking (West Parry Sound Health Centre)
- Cecelia Marshall (Toronto Rehab Institute)
- Dr. Kristine Newman (Ryerson University)
- Kimberly Schlegel/Brynn Roberts (LHSC)
- Dr. Lisa VanBussel (St. Joseph's Health Care, London)



Project Progression

Feb - June 2017

June 2017 -May 2018

Nov 2017 -April 2018

Spring & Summer 2018

Late 2018 -May 2019 Gathering & Analysis of DOS Versions & Defining Critical Elements

Draft New Standardized DOS

Stakeholder Input = >350 stakeholders

Pilot New Standardized DOS & Data Analysis

Finalize the New Standardized DOS

Creation of Knowledge Translation Supports

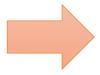


Gathering & Analysis of DOS Versions & Defining Critical Elements

Critical Elements

- ✓ Ease of use of point of care staff
- ✓ Paper version
- √ Signature/initials (accountability)
- ✓ Reason for completing the DOS
- ✓ Behavioural observation variables (progressive levels of risk)
- ✓ Include sleep in the behavioural observation variables
- ✓ Capturing positive behaviour (e.g. smiling, laughing)
- ✓ Inclusion of context
- ✓ 24 hour cycle at a glance
- ✓ Area for analysis
- ✓ Decision about continuing DOS











Nov 2017 -May 2018

> Spring & Summer 2018

Draft New Standardized DOS

Stakeholder Input = >350 stakeholders

Pilot New Standardized DOS & Data Analysis

Focus Groups (Nov 2017) CAGP Workshop Participants (Nov 2017) Advanced
Practice
Nurses
(Jan 2018)

8 Quality Improvement Project Sites (June 2018)

= >350

brainXchange
Webinar
Participants
(Feb 2018)

BSO Lived Experience Advisory (March 2018) Data
Analysis
Advisors
(April 2018)



Finalize the New Standardized DOS

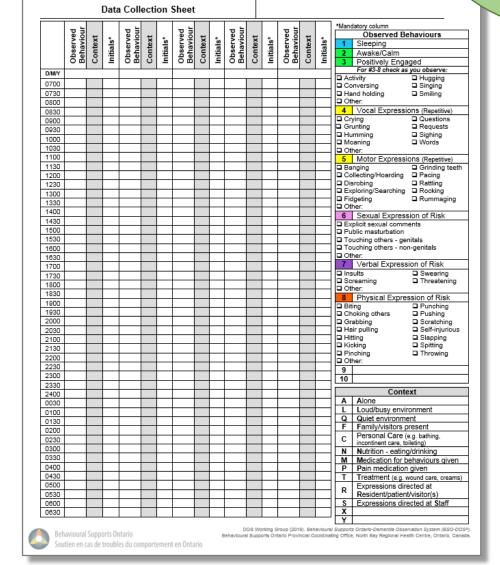
Creation of Knowledge Translation Supports

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BSO-DOS ^e stop date:)S ^c :	Se	ection	SI	Implementation of a new strategy/intervention Adjustment of medications Support for urgent referral/transfer Other: print name): Signature: Prumbers according to the colour-coded legend							
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	Day #1	Day #2	Day #3	Day #4	Day #5		(Add up the number of blocks for each category over 5 days)		(Divide the total % hour blocks by 10) Hint: Move the decimal point one space to the left	Frequency	Duration	Risk
1 Sleeping						-		*10				
Awake/Calm						-		*10				
Positively Engaged						-		*10				
Vocal Expressions						•		*10		0		
Motor Expressions						-		*10				
Sexual Expression of Risk		<u> </u>	_		<u> </u>	-		*10		0	0	0
Verbal Expression of Risk Physical Expression of Risk		<u> </u>	_		_	-		*10		븝	00	-
Pilysical Expression of Risk		-			_	-		*10		ä	픕	ä
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BSO-DOS®

Behavioural Supports Ontario-Dementia Observation System

Released May 2019







Behavioural Supports Ontario-Dementia Observation System

Do Not Copy

Worksheet

5	Step #1: Background (Complete prior to Data Collection Sheet)												
Reason for Completing BSO-DOS ⁶ : □ Baseline/Admission □ Transition/Move □ Adjustment of medications □ New behaviour: □ Change in behaviour(s) □ Section completed by (print name):											on	_	
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	ISO-DOS [®] stop date:							gnature:					
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-	Positively Engaged		_	_	_	_	-		*10		-	-	-
4	Vocal Expressions		\vdash	-		-	-		*10		-	7	-
5	Motor Expressions		\vdash	-	\vdash	-	-		*10		-	-	-
6	Sexual Expression of Risk		\vdash	\vdash		\vdash	-		*10		_	_	-
7	Verbal Expression of Risk		\vdash	-	\vdash		-		*10		_	_	-
8	Physical Expression of Risk		\vdash				-		*10		_	_	-
9	,		\vdash				-		*10				
10							-		*10				
V	What the BSO-DOS® data reve	al (e.g.	types	of beh	aviour	s expre	ssec	i, patterns, time of da	sy, bro	oken sleep):			_
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	Repeat BSO-DOS ^o In 4-6 w	eeks	,					Non-pharmacólo	gical	Interventions sugge	sted:	1	
5	No further BSO-DOS ^e comp	letion	at this	time									_
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	Consult/meet with Substitute	Deck	sion N	taker ((SDM))		Other:					_
S	ection completed by (print name	00						Signature:					
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Worksheet

- ✓ Captures reason for completing the BSO-DOS[©]
- ✓ Guides analysis of the BSO-DOS[©] data
- ✓ Supports the team in planning next steps with care partners





Behavioural Supports Ontario-Dementia Observation System

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Data Collection Sheet

	Observed Behaviour	Context	Initials*	Observed Behaviour	Context	Initials*	Observed Behaviour	Context	Initials*	Observed Behaviour	Context	Initials*	Observed Behaviour	Context	nitials*	*Mandatory column Observed Behaviours 1 Sleeping 2 Awake/Calm
	2 9	ರ	Ξ	0 9	ŭ	=	0 m	ŏ	=	0 9	ŭ	Ξ	0 m	ŭ	=	3 Positively Engaged
D/M/Y																For #3-8 check as you observe:
0700																☐ Activity ☐ Hugging ☐ Conversing ☐ Singing
0730																☐ Hand holding ☐ Smiling
0800	-															☐ Other:
0830	-															4 Vocal Expressions (Repetitive)
0900																☐ Crying ☐ Questions
0930																☐ Grunting ☐ Requests ☐ Humming ☐ Sighing
1000																Moaning Signing Words
1030																□ Other:
1100																5 Motor Expressions (Repetitive)
1130																☐ Banging ☐ Grinding teeth
1200	-															□ Collecting/Hoarding □ Pacing
1230																☐ Disrobing ☐ Rattling ☐ Exploring/Searching ☐ Rocking
1300	\rightarrow															☐ Fidgeting ☐ Rummaging
1330																Other:
1400	\rightarrow															6 Sexual Expression of Risk
1430	-															☐ Explicit sexual comments
1500	-	-						_	_							□ Public masturbation
1530	-															☐ Touching others - genitals ☐ Touching others - non-genitals
1600 1630	-															Other:
1700	-							_								7 Verbal Expression of Risk
1730	-															☐ Insults ☐ Swearing
1800	-															☐ Screaming ☐ Threatening
1830	_															☐ Other:
1900	_															Physical Expression of Risk
1930	_															☐ Biting ☐ Punching ☐ Choking others ☐ Pushing
2000	-															Grabbing Grabbing Scratching
2030	-															☐ Hair pulling ☐ Self-injurious
2100	-															☐ Hitting ☐ Slapping
2130																☐ Kicking ☐ Spitting
2200	-															☐ Pinching ☐ Throwing ☐ Other:
2230																9
2300																10
2330																
2400																Context
0030																A Alone
0100																L Loud/busy environment
0130																Q Quiet environment F Family/visitors present
0200																Decree of Court of the
0230																C Personal Care (e.g. bathing, incontinent care, toileting)
0300																N Nutrition - eating/drinking
0330						$ldsymbol{le}}}}}}}}$										M Medication for behaviours given
0400																P Pain medication given
0430																T Treatment (e.g. wound care, creams)
0500						$ldsymbol{ld}}}}}}$										R Expressions directed at
0530																Resident/patient/visitor(s)
0600	\perp															S Expressions directed at Staff
0630																X



Data Collection Sheet

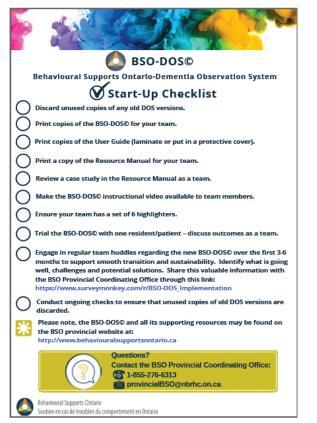
- √ 5 days of direct behavioural observation
- ✓ Updated person-centred language
- ✓ Updated 'Observed Behaviours' Legend
- ✓ New check boxes within each observed behaviour category
- ✓ Addition of initials to align with professional standards
- ✓ New context legend



Finalize the New Standardized DOS Creation of Knowledge Translation Supports



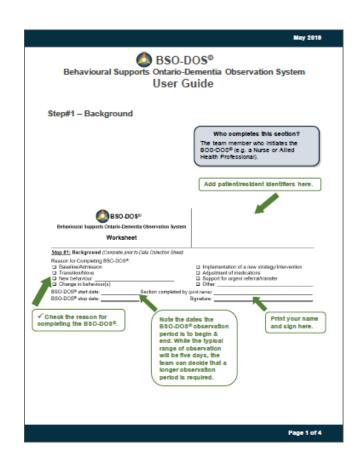
Start-Up Checklist



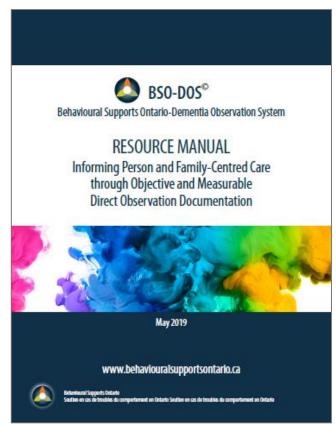
Instructional Video



User Guide



Resource Manual





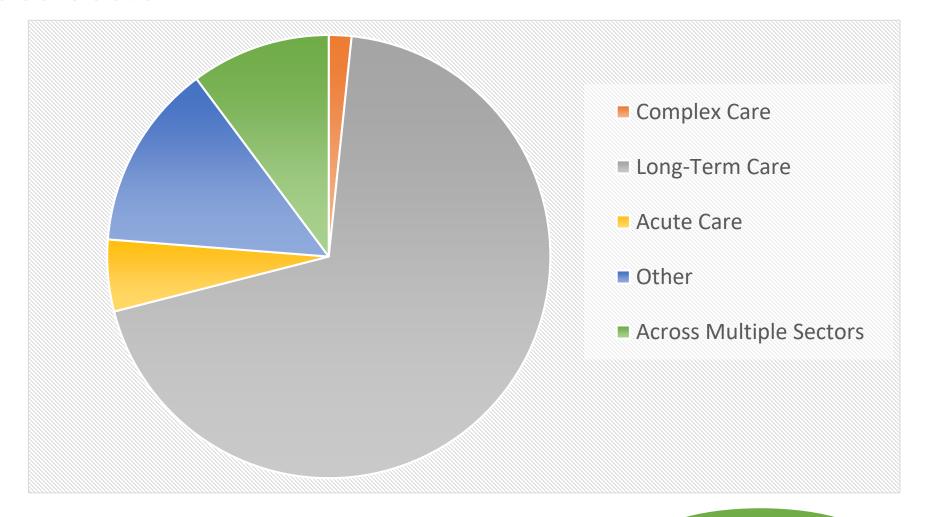
BSO-DOS[©] - Tracking the Spread





1090

BSO-DOS[©] - Tracking the Spread Intended Sector





1090

The benefits of your team utilizing the BSO-DOS[©]

- ✓ Common language and data analysis to support clinical decision-making and care planning for residents expressing responsive behaviours.
 - Provides baseline of behaviour for individuals transitioning into a new environment (e.g. LTC).
 - Identifying patterns, trends, contributing factors and modifiable variables associated with responsive behaviours.
 - Identifying the distinction between those behaviours of greatest risk and those behaviours that should be accommodated through application of non-pharmacological interventions.
 - Evaluating the outcomes of non-pharmacological interventions.
 - Informing medications changes.
 - Educating and planning care with families.
- ✓ Common tool within and across organizations and sectors.
 - Support referrals for assessment by external consultants/resources.
 - Communicating need to transfer residents to more appropriate care levels or safer environments.





Benefits that have been shared...

We are getting a more accurate picture of possible causes to behaviours.

It provides better data.

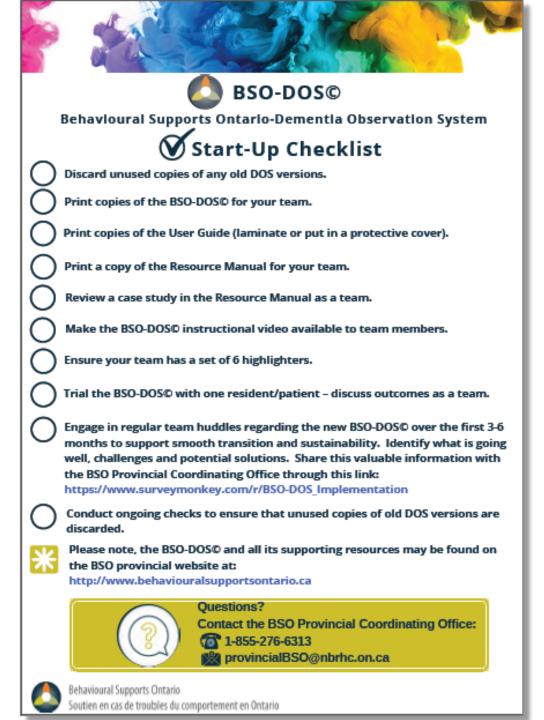
Promotes **engagement of the team** to understand the risks , frequency and duration of the responsive behaviours of concern and **working collaboratively to implement strategies**.

The usage is much **more streamlined** than the previous version! Feedback from the interdisciplinary team is reflected more openly as it is much **more user friendly. Writing progress notes is a breeze** as well because the document pretty much writes it for you on the analysis side.

Team members are excited to use the tool as it is **more informative** and organized. **Easy to use** (once get familiar to the tool). We love using this tool! It has been great to see registered staff standing by it - using it as an opportunity to catch the efficacy of medication, evaluate pain, and determine appropriate non-pharmacological strategies! It's been great to have a way for the team to work together holistically.



Supporting Implementation of the BSO-DOS[©]





Implementation





Challenges & Solutions



Do you have to print the BSO-DOS[©] in colour?



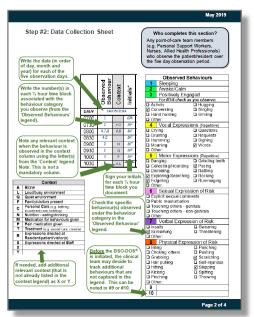
No, not necessarily. If your team has limited access to a colour printer, you can print the BSO-DOS[©] in black and white or grey scale.

The important part is to highlight the completed data collection sheet

according to the colour coded legend.

Suggested Strategies:

- ✓ Print the BSO-DOS[©] in colour and laminate
- ✓ Print the User Guide in colour and laminate





Can the BSO-DOS[©] Instruction Video be added to our e-learn platform?



Yes! You can direct your team to the BSO-DOS[©] webpage to watch the video, but if you prefer to add to it your e-learn platform it is available to upload through:

https://www.youtube.com/watch?v=EG6KSr12GD8&feature=youtu.be

For those using Surge Learning, it has been added to your library.



Suggested Strategy:

✓ Leadership to assign the BSO-DOS[©] Instructional Video to your staff.



Can we build the BSO-DOS[©] into our electronic documentation system?



Soon! For organizations that use point-of-care technology (e.g. handheld devices), we will be providing vendors the opportunity to build the BSO-DOS[©] electronically.

Terms of Use (for vendors in various sectors) will soon be available on BSO-DOS[©] webpage. Vendors will be provided an Electronic BSO-DOS[©] Standard to be used to build their application.



Suggested Strategy:

✓ If you use point-of-care technology, speak to your vendor regarding building the BSO-DOS[©] electronically.



Make an Implementation Plan!

- ✓ Use the Start-Up Checklist
- ✓ Dialogue with leadership and make a plan together
- ✓ Is the team ready? What is needed to be ready? (e.g. internal policies)
- ✓ Create an educational plan
- ✓ Educate staff (e.g. Instructional Video) before starting to use the BSO-DOS[©]
- ✓ Develop a plan to reinforce and commend use of the BSO-DOS[©]
- ✓ Create a BSO-DOS[©] package for each area/neighbourhood (e.g. copies of BSO-DOS[©], laminated User Guides, printed Resource Manual, set of highlighters)





Support, Reinforce & Celebrate! Use Many Forms.

- √ Key leaders/educators to support implementation
- ✓ Small group e.g. huddles, shift change
- ✓ Demonstrations
- ✓ Review Case Studies from the Resource Manual
- ✓ 1:1 support e.g. at the elbow
- ✓ Keeping communication lines open be available for questions
- ✓ Regular check-ins during the implementation process
- ✓ Congratulate & celebrate successes!





Challenge #1: Time to Complete

Root of Challenge:

- Reality of high demands in health care a stretched work force
- Not seeing value in completing the tool
- Sometimes the reality is there will be blanks



Solutions:

- ✓ First, appreciate and acknowledge the high demands and the challenges faced
- ✓ Share the benefits of a fully completed BSO-DOS[©]
- ✓ It may look overwhelming, but teams find is easier as they become familiar with the tool
- ✓ Acknowledge reality that there will be blanks at times
- √ Refer to Frequently Asked Questions for scripted response
- ✓ Circle back to team members with the outcomes of the completed BSO-DOS[©]
- √Thank/celebrate team members for their contributions!



Challenge #2: New Observed Behaviour & Context Legends

Root of Challenge:

- Change in practice
- Complexity of language and concepts

Solutions:

- ✓ Continued education and support related to the new legends
- ✓ Observed Behaviours:
 - Review instructions on how to complete. Enter number in the column, check the box(es)
 - Don't change the check boxes to letters to add to the observed behaviours category!
 - Opportunities for future innovation with the electronic BSO-DOS[©]

✓ Context:

- Review instructions on how to complete. Reminder that it is not a mandatory column
- Stress value in knowing the context
- ✓ Refer to User Guide & Resource Manual (including Frequently Asked Questions for scripted response)

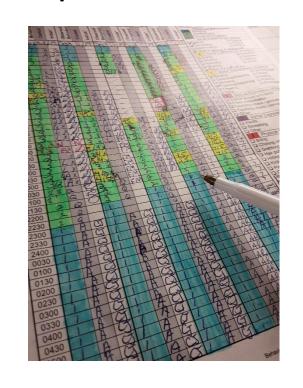




for your role in supporting the implementation and utilization of the BSO-DOS©!



Your experience in Implementing the BSO-DOS[©]?

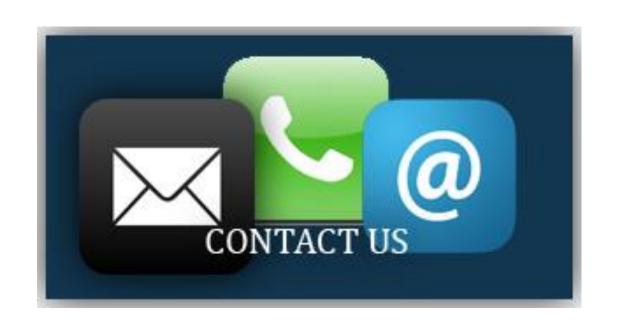




Share what is going well, challenges and solutions:

https://www.surveymonkey.com/r/BSO-DOS Implementation





Contact information:

BSO Provincial Coordinating Office 1-855-276-6313 provincialBSO@nbrhc.on.ca



Questions?



