

Strengthening the Dementia Observation System (DOS): Seeking Your Contributions to the Standardized Version and Next Steps!

February 27, 2018

Presenters:

Dr. Lori Schindel Martin

Debbie Hewitt Colborne









Objectives

- Describe best practice for direct observation of behaviour in older adults with dementia and responsive behaviors as it relates to interprofessional care planning and clinical decision making.
- Discuss the Behavioural Supports Ontario current strategy to update and standardize the Dementia Observation System (DOS).
- Provide an overview of revisions underway to the DOS.
- Provide an opportunity for participants to give input/feedback regarding the standardization of the 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 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
- Reliable/accurate/consistent behavioural documentation remains a challenge
- Clinical teams need many tools in their toolbox!





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

(Curyto,, K., Van Haitsma, K., Vriesman, D. 2008; McCann JJ, Gilley DW, Hebert LE, Beckett LA, Evans DA. 1997; Cohen-Mansfield J, Libin A. 2004).





Direct Behaviour Observation



The Gold Standard in Behavioural Assessment

Why is it important?

- Provides interprofessional team with objective and measurable data to identify patterns of Behavioural and Psychological Symptoms of Dementia (BPSD)
 - ✓ Frequency, duration, precipitants and pattern of behaviors
- Provides systematic, theory-based measurement of specific behaviors targeted by an intervention
 - ✓ Responsive to change

(Curyto,, K., Van Haitsma, K., Vriesman, D. 2008; P.I.E.C.E.S., 2002; Schindel Martin, 1998; Van Derlinde, Stephan, Dening & Brayne, 2014)





DOS History

Dementia Observation System

FEATURES

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



Luri Schindel Martin

Mr. B., who has Alzheimer's diseases and had been fiving at horne, has been addretted to your long term one facility because his family can no longer deal with him. His behaviour has changed diseasetcably he does to sleep for more than 30 minutes at a time when his awake, he ather continually looks for the door so he can get to work or shoute at his wife in a varie attempt to commission his mach. The made institute him him to been only deep to commission his mach. The more to commisse him reion, he is baginning to have problems to commisse and continue, and he fell yesteration.

How a Dementia Observational System Can Help

For exceptors, a newly admitted resident with dementia often poses a diallenge. Not knowing what constitutes a typical day for the resident, caregivers may reach inaccurate conclusions, which could lead to indfactive treatment approaches or inclusion regimens that ingget negotive provisions.

In these types of situations, a dementia observational system can be a north, bed. Caregiores can made a resident 's behaviour, both positive and negative, over a number of days, in 34-host blocks and from the energing behavioural pattern, calabilish the resident's daily righter.

With a dementia observational system, caregivers our determine the frequency and duration of No. 25 a periods of restricted and periods of the primes or activity, as well as the time when he is calm and agriculated.

When a resident is aggressive or calls out frequently, staff generally perceive such events as listing much longer 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 greatest risk as compared to frose that should be accommodoted. For example, caregivers may group all challenging behaviours together and therefore label a residers "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 14-hour cycle. A more benign behaviour, such as pacing, may occur most bequently during each day, and interventions need to be directed at programming to accommodate this.

The Dementia Observational System What is if

A dementia observational system is actually a document of written "picture" of haw a resident occupies him or herself in a defined block of time. At Shaleen Village Narsing Home, in Hamalton, Haratio, the document that congrieva use is called a Resident Observation Record (Chart 1). Caregives select a "number" from the behavioural Rey, located at the top of the document, that best describes the resident during a 30-minute period and record it in the appropriate timelary due.

Two worksheet versions of the Resident Observation Record are used at Shalom Village:

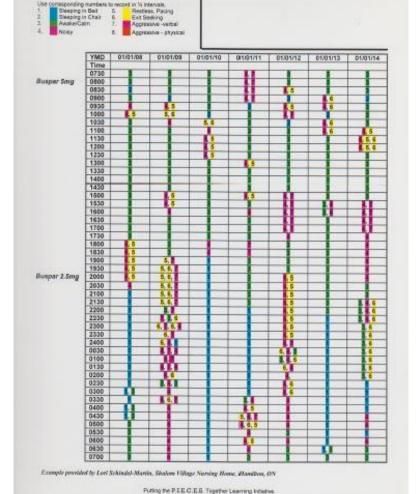
A The standardized worksheet has a behavioural key that tracks periods of steep, alert and calm wisofulness, noise-making, restlessness, ordering and aggrenous, both restal and physical. This version is most useful for new residents who have a scant behavioural history. Canogrees use the document to determine which behavioural might require some based intervolose.

✓ The individualized worksheet has a behavioural key ordshing care givers to describe as many as eight well-defined behaviours sleeping in body sleeping in distin awaked-caller menty existes, priving end-schlingaggressive – serbal, and aggressive – physical. These target behaviours, which are written directly in the form, are used to capture the unique characteristics of a resident.

Both worksheets use a numbering spatern in indicate degree of riskthe lower the number, the lower the associated risks the higher the number, the higher the associated risk. Positive and neutral belowings, such as "sleeping in bed." "sleeping in chair," and "avalerciatin," should sharps appear as first-level behaviours on the key, listing these positive and neutral descriptors on each behavioural key helps suff to see the full mage of a resident's behavioural portle. If these types of descriptors are about from the key, staff often leave portions of the 24-hour map blank or write their costs descriptors in the squares. This secules in class incon-

Be including a resident's skep status in the behavioural key, categores can evaluate the success of a behavioural or psychopharmacological intervention directed at inservin. This can also help staff determine if a new intelligation or a dosage increase is causing side effects, such as committeein.

Most importantly, the inclusion of positive descriptors, such as "asside and calm," on the behavioural key, allows caregivers to determent the amount of time the evident engage in meaningful, positive behaviour versus negative behaviour. Seeing the total picture can help set the tone so that caregivers arous badding and servetyping the resident



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DOS Working Group

A project from the 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)
- Dr. Lisa Van Bussel (St. Joseph's Health Care, London)
- Dr. Andrea laboni (Toronto Rehabilitation Institute)
- Fernanda Fresco (North Bay Regional Health Centre)
- Adriana Barel (St. Joseph's Health Care, London)
- Julia Baxter (St. Joseph's Healthcare Hamilton)
- Monica Bretzlaff (North Bay Regional Health Centre)
- Lina DeMattia (Alz Society of Chatham-Kent)
- Gail Elliot (DementiAbility)

- Pam Hamilton (P.I.E.C.E.S.)
- Teresa Judd (Central West LHIN)
- Cecelia Marshall (Toronto Rehabilitation Institute)
- Dr. Kristine Newman (Ryerson University)
- Kimberly Schlegel/Brynn Roberts (London Health Sciences Centre)
- Dr. Lindy Kilik (Providence Care)
- Katrina Grant (Providence Care)
- Stephanie Jarvis (William Osler Health System)
- Jodi Laking (West Parry Sound Health Centre)
- Adriana Caggiano (RGP of Toronto)

Masters of Nursing Student: Valentina Donison (Ryerson University)



Project Progression





Work to Date

- Collection of DOS versions provincially and nationally
 - √ 43 organizations submitted
 - √ 48 DOS versions collected

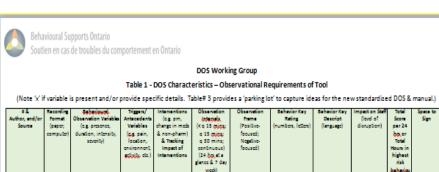
Same as	Some	Significant
Original	Modifications	Modifications
11	27	10

- Analysis of DOS versions
- Defining critical elements of standardized DOS
- Draft versions of standardized DOS





Analysis Process



a S. Author, and/or Source	Recording Format (paper; computer)	Sebelouroil Observation Variables (c.g. presence, duration, intensity, seventy)	Variables (c.g. pain, location, environment, activity, etc.)	change in moth & non-pharm) & Tracking Impact of Interventions	q 15 mjqs; q 30 mins; continuous) (24 hg, at a glance & 7 day week)	Observation Frame (Positive- focused; Negative- focused)	Sehavior Key Rating (numbos, lottos)	Descript (language)	Impact on Staff (lovel of disruption)	Fotal Score per 24 bg, or Total Hours in highest risk bebesies (per 24 bg cycle	Space to Sign	
a 1. Standard DOS (L. Schjodal Martin) Ravisuser L. Qeldards	Paper	RI-3 verifiles et til standed Calin/rating bothesiours. RI-4 verifiles er related to responsive bothesiours.	antecedents are identified. This is nomal discomed	interventions are identified. This is considered once the information is	Observation to the control of the co	Times of calm and the calm behaviours are identified.	A number coding is used and also galaugued in a coding in a coding and a coding.	Language is lacking that posen control approach. Yorkal and physical behaviours lack definitions.	The daily intervals and the days of reporting can be disruptive to staff.		No identified julge to a sign.	



Table 2 - DOS Infrastructure – Education, Policy and Implementation Requirements

(Note 'x' if variable is present and/or provide specific details. Table# 3 provides a 'parking lot' to capture ideas for the new standardized DOS & manual.)

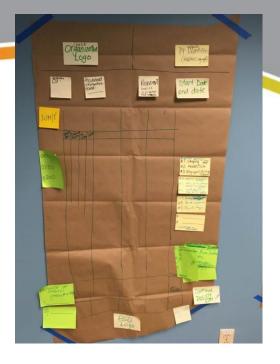
a, Author and/or Source	Sahavior Kay Definitions	Analysis of Documented Obsources of Co. (e.g. documentation of findings, interpretation & plan)		Decision re: Continuation or Cassation of DOS	Clinical/Sehavi or Stratagy or Intervention Recommendati ons	Instructions (DOS background, purpose, goals, individual vs. standardized, instructions for completion, analysis & interpretation)		ation Policy for Administra tive Use	
81. Sandard DS (L. Schindal Martin) Reviewer L. College	ns	ne	no	No-the tool is shoutcured to be completed in some day, however no indication that it should continue.	ne	no	no	no	The langth of Sime to complete this COS is second complete this COS is second days; could it be sherthered to five? COS in the president to collect the necessary data in five days?





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
- ✓ Positive behaviour anchors (e.g. sleeping, smiling, engaging)
- ✓ Inclusion of context/interventions
- ✓ 24 hour cycle at a glance
- ✓ Area for analysis
- ✓ Decision about continuing DOS





Draft Standardized DOS

PLACE HOLDER FOR ORGANIZATION INFO/LOGO

Dementia Observation System (DOS) Worksheet

Behavioural Supports Ontario

Soutien en cas de troubles du comportement en Ontario

PLACE HOLDER FOR PT IDENTIFIERS

(e.g. addressograph)

PLACE HOLDER FOR ORGANIZATION INFO/LOGO

Dementia Observation System (DOS) Data Collection Sheet

PLACE HOLDER FOR PT IDENTIFIERS

(e.g. addressograph)

Part #1 - Background (Complete prior to DOS Data Collection	Sheet)			*	T	*	T	*	T	*	T	*		*Mandatory column
	- Chicay			Observed Behaviour*	.	Observed Behaviour*		Observed Behaviour		Observed Behaviour*		Observed Behaviour*	_	Observed Behaviours
Reason for Completing DOS: Baseline/Admission	☐ Implementation of a new strategy/inter	vention		Observe Behavior	Initials*	2.3	Context Initials*	<u>\$</u>	Context Initials*	Observed Behavior	Initials*	Ž .ž	Context Initials*	1 Sleeping
□ Transition	☐ Adjustment of medications	vention		P Se le	[] ∰	P Se	iti ji	P Se	ii s	l se les	: #2	bs e	計算	2 Awake/Calm 3 Positively Engaged
New behavioural expression	☐ Support for urgent referral/transfer			0 40 0	5 =	0 4	ŭΙΞ	0 4	ŭΞ	0 0 0	5 =	0 4	ŭ =	Positively Engaged For #3-8 check as you observe:
Behaviour(s) increasing in duration, frequency	Other:		Y/M/D			 		+		+ -		+		☐ Activity ☐ Hugging
and/or risk		7	0700		\top	\vdash		+		+	\top	+		☐ Conversing ☐ Singing ☐ Hand holding ☐ Smiling
DOS start date:	DOS stop date:		0730		+	1 1	\top		\top	1 1	+	+-		☐ Hand holding ☐ Smiling ☐ Other:
Section completed by (print name):	DOS stop date: Signature:		0800											4 Vocal Expressions (Repetitiv
			0830		+	\vdash		\vdash	+	+-+	+	-	\vdash	☐ Crying ☐ Phrases
Complete the DOS D	ata Collection Sheet		0930		+	\vdash	_	+ +	+	+	+	+-	\vdash	Grinding teeth Questions Grunting Requests
D			1000		+	+		+ +	-	+ +	+	+		☐ Howling ☐ Sighing
Part #2 – Analysis & Planning (Use completed Data Collection Recommendation: Highlight the numbers on the data collection sh	on Sheet)		1030		+	\vdash	-	+	-		\top	+-		☐ Humming ☐ Syllables
			1100		\top						\top			Moaning D Words
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Total 1/2		Total 1/2	1200											Banging D Pacing
hour blocks 1 Sleeping Broken? No Yes	8 Sexual Expression of Risk	hour blocks	1230											☐ Collecting ☐ Rattling
Sleeping Broken? D No D Yes Awake/Calm	Sexual Expression of Risk Verbal Expression of Risk	+	1300					\perp			\perp			☐ Disrobing ☐ Rocking
3 Positively Engaged	B Physical Expression of Risk	+	1330			\sqcup		\perp					~	☐ Fidgeting ☐ Rummaging
Vocal Expressions	D 9	+	1400		\bot	\vdash		\vdash			_			☐ Familiar/exit-seeking ☐ Other:
5 Motor Expressions	10	+	1430 1500		+	\vdash		++		+	+-		7	6 Sexual Expression of Risk
			1530		+-	\longrightarrow		++	-				\vdash	☐ Intrusive verbal expression
Behaviour of Interest:	Behaviour of Interest:		1600		+	+	_	+	_	+ +	-			☐ Intrusive physical expression
Total ½ hour blocks behaviour exhibited: Day 1 Day 2 Day 3 Day 4	Total ½ hour blocks behaviour exhibited: Day 1 Day 2 Day 3	D4	1630		+	+	-	+	-			_	\vdash	☐ Hypersexual
TOTAL Day 1 Day 2 Day 3 Day 4	Day 1 Day 2 Day 3	B Day 4	1700		+	 	_	+ +) (+		Verbal Expression of Risk
Trends/Analysis:	Trends/Analysis:		1730		+	 		+ +	- 4		_	+		☐ Insulting ☐ Screaming ☐ Swearing ☐ Threatening
□ Duration concern	☐ Duration concern		1800		+	\vdash	-	+	4		\top	+-		Other:
☐ Frequency concern	□ Frequency concern		1830		\top					7	\top			8 Physical Expression of Ris
☐ Risk concern	□ Risk concern		1900			\Box				-	\top			☐ Biting ☐ Pinching
What the DOS data reveals:			1930						1					☐ Choking others ☐ Punching ☐ Grabbing ☐ Pushing
That the Boo data reveals.			2000					1)					Hair pulling Scratching
7			2030			\perp	_			\perp				☐ Hitting ☐ Self-injurious
. /			2100		_	\vdash				+-	_			☐ Kicking ☐ Slapping
Possible contributing factors (remember P.I.E.C.E.S.):			2130 2200		+	-		1			+	+		☐ Throwing ☐ Spitting ☐ Other:
1 035/0/2 00/1/1/04/1/2 (Tellieller 1 .t.c.o.c.o.).			2230		+			+	-	+	+	+-	\vdash	9
			2300				_	+	-	+ +	+	+		10
			2330					+		+ +	+	+		
			2400		-		-	+ +	-	+ +	+	+		Context
Next Steps:			0030					1 1			+			A Alone C Personal Care (e.g. bathing.
☐ Continue DOS for another 5 days	□ Progress note written		0100		1	\vdash		+			\top			C Personal Care (e.g. bathing, incontinent care, tolleting)
 ABC charting around particular events/behaviour 	☐ Care plan updated		0130	V-										L Loud/Busy Environment
☐ Clinical huddle/meeting	☐ Referral:		0200											M Medication for Behaviours
■ POA consulted/Family meeting	☐ Repeat DOS in 4-6 weeks		0230	7										N Nutrition - eating/drinking
■ Medication adjustment/review	□ No further action at this time		0300	Y		\sqcup		$oxed{\Box}$						P Pain Medication
■ Non-pharmacological interventions suggested:	☐ Other:		0330		\bot	\vdash		\bot		\bot	\bot		\vdash	Q Quiet Environment
	u ouer		0400	\vdash	_	\longmapsto	-	+	-	++	\perp	+	\vdash	R Expressions directed at Resident/pt(s) or visitor(s)
			0430	\vdash	+	\vdash		+		+-+	+		\vdash	S Expressions directed at Staf
Section completed by (print name):	Signature:		0500	\vdash	+	\vdash	+	+	-	+-+	+	+	\vdash	T Treatment (e.g. wound care,
DOS Working Group (2018). Dementia Observation System (DOS). Behavio	ural Supports Ontario Provincial Coordinating Office, Onta	irlo, Canada.	0600	\vdash	+	+	-	+		+	+	+	\vdash	catheterization, creams)
Rehavioural Support	ts fintario		3000	\vdash	_	$\overline{}$		+		+	_		\vdash	 V Visitors/Volunteers present



Page #1 – Background Section

PLACE HOLDER FOR ORGANIZATION INFO/LOGO

Dementia Observation System (DOS) Worksheet

PLACE HOLDER FOR PT IDENTIFIERS

(e.g. addressograph)

Part #1 - Background (Complete prior to DOS Data Collect	tion Sheet)
Reason for Completing DOS: Baseline/Admission Transition New behavioural expression Behaviour(s) increasing in duration, frequency and/or risk	□ Implementation of a new strategy/intervention □ Adjustment of medications □ Support for urgent referral/transfer □ Other:
DOS start date:	DOS stop date:
Section completed by (print name):	Signature:
Complete the DOS	S Data Collection Sheet



Page #2 – Data Collection Sheet

	Observed Behaviour*	Context	Initials*												
Y/M/D															
0700															
0730															
0800 0830															
0830															
0900															
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*Mandatory column

Observed Behaviour* Observed Behaviour* Observed Behaviour* Observed Behaviour* Observed Behaviour* Context Context Context Context Initials* Context Initials* Initials* Initials* Initials* Y/M/D DC

^iviano	datory column							
		Behaviours						
1	Sleeping							
2	Awake/Cal							
3	Positively E	ngaged						
_	For #3-8 check as you observe:							
□ Act		□ Hugging						
Cor	nversing	□ Singing						
□ Oth	nd holding	□ Smiling						
4		raniona (Danattiaa)						
-	vocal Expl	essions (Repetitive) Phrases						
□ Cry	ing							
Gru	nding teeth	☐ Questions						
□ Hov		□ Requests□ Sighing						
	mming	☐ Syllables						
□ Mo		□ Words						
Oth		□ Wolds						
		ressions (Repetitive)						
□ Bar		□ Pacing						
	lecting	□ Rattling						
	robing	□ Rocking						
□ Fid		□ Rummaging						
□ Far	niliar/exit-seel	king						
□ Oth	er:	_						
6	Sexual Exp	ression of Risk						
□ Int	rusive verbal e	expression						
	rusive physica	l expression						
□ Ну	persexual							
7		ression of Risk						
	ulting	□ Screaming						
	earing	□ Threatening						
□ Otl		. (D.)						
8		xpression of Risk						
□ Bit		□ Pinching						
	oking others	□ Punching						
	abbing	□ Pushing						
□ Hit	ir pulling	 □ Scratching □ Self-injurious 						
□ Kid		☐ Slapping						
	rowing	☐ Spitting						
□ Otl		- Spitting						
9								
10								



Page #2 – Data Collection Sheet

	Observed Behaviour*	Context	Initials*												
Y/M/D															
0700															
0730															
0800	4	Α	DC												
0830															
0900															
0930															
1000															
1030															
1100															
1130															1
1200															
1230															

	Context
Α	Alone
С	Personal C are (e.g. bathing, incontinent care, toileting)
L	Loud/Busy Environment
М	Medication for Behaviours
N	Nutrition - eating/drinking
Р	Pain Medication
Q	Quiet Environment
R	Expressions directed at
ĸ	Resident/pt(s) or visitor(s)
S	Expressions directed at Staff
т	Treatment (e.g. wound care,
	catheterization, creams)
V	Visitors/Volunteers present
Х	
Υ	



Page #1 – Analysis & Planning

Part #2 - Analysis & Planning (Use completed Data Collection Sheet)

Recommendation: Highlight the numbers on the data collection sheet according to the colour coded legend.

Behavior observed during observation period (check all that apply and total 1/2 hour blocks):

			Total ½ hour blocks
1		Broken? ☐ No ☐ Yes	
2	Awake/Cal		
3	Positively E	Engaged	
4	Vocal Expr		
5	Motor Expr	essions	1

Behaviour of Interest:

Total ½ hour blocks behaviour exhibited:

	Day 1	Day 2	Day 3	Day 4
TOTAL				

Trends/Analysis:

- Duration concern
- Frequency concern
- Risk concern

		Total 1/2
		hour blocks
6	Sexual Expression of Risk	
7	Verbal Expression of Risk	
8	Physical Expression of Risk	
9		
10		

Behaviour of Interest:

Total ½ hour blocks behaviour exhibited:

	Day 1	Day 2	Day 3	Day 4
TOTAL				

Trends/Analysis:

- □ Duration concern
- Frequency concern
- Risk concern



Page #1 – Analysis & Planning

What the DOS data reveals:	
Possible contributing factors (remember P.I.E.C.E.S.):	
Next Steps:	
☐ Continue DOS for another 5 days	 Progress note written
☐ ABC charting around particular events/behaviour	☐ Care plan updated
☐ Clinical huddle/meeting	☐ Referral:
□ POA consulted/Family meeting	□ Repeat DOS in 4-6 weeks
■ Medication adjustment/review	 No further action at this time
Non-pharmacological interventions suggested:	Other:
	☐ Other:
Costion completed by (print name):	Cianatura
Section completed by (print name):	Signature:

DOS Working Group (2018). Dementia Observation System (DOS). Behavioural Supports Ontario Provincial Coordinating Office, Ontario, Canada.





Collaborative Work

- Feedback/input from:
 - ✓ DOS Working Group
 - ✓ CAGP Participants
 - ✓ Focus Groups
 - ✓ External reviewer webinar
 - ✓ BSO Lived Experience Advisory





Your Valuable Contributions: Informing the Next Draft

1) Today:

- ✓ Add your comments/questions within the chat pod
- ✓ Ask a question or make a comment by unmuting your phone
- 2) Follow-up Survey







Follow-Up Survey

https://www.surveymonkey.com/r/PDX7TXH

Due Date: March 16/18







Project Progression







Contact information:

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

