Ontario Health (Cancer Care Ontario) Symptom Spotlight Webinar:

Insomnia and Sleep Disturbances

Wednesday September 28, 2022 | 12:00-1:00pm

Ontario Health

Housekeeping

- This webinar is being recorded and the recording will be made available via YouTube.
- If you have any questions, please enter it in the chat. These questions will be answered in an FAQ that will be posted on our website.

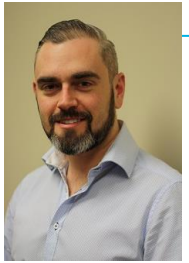
Agenda

Time	Topic	Presenter
12:00 pm – 12:05 pm	Introductions & Learning Objectives	Nicole Montgomery
12:05 pm – 12:10 pm	Screening for Sleep Problems	Dr. Natalie Coburn
12:10 pm – 12:30 pm	Assessment & Management of Insomnia in Cancer Patients	Dr. Tyler Tulloch
12:30 pm – 12:55 pm	Responding to Sleep Disturbance in Routine Clinical Practice	Dr. Doris Howell
12:55 pm – 1:00 pm	Closing	Dr. Natalie Coburn

Introductions

Dr. Natalie Coburn
Clinical Lead, Symptom Management, Ontario Health

Dr. Doris Howell
Emeritus Scientist, Princess Margaret Cancer Centre



Dr. Tyler Tulloch
Clinical Health Psychologist, St. Joseph's Healthcare Hamilton

Learning Objectives

The objectives of this webinar is to understand:

- Why assessing for sleep problems in people undergoing cancer treatment is important
- How to assess for and manage sleep problems for people undergoing cancer treatment
- What resources are available for providers and patients to address sleep problems in the cancer population

Screening for Sleep Problems: YSM – General Symptoms +

Dr. Natalie Coburn

Patient Reported Outcome Measures (PROMs)

What are they?

- PROMs are measurement instruments (i.e., questionnaires) that patients complete to provide information on aspects of their health status and quality of life (e.g., symptoms, daily function and mental health), which are often not captured by standard diagnostic tools
- PROMs are essential to understanding whether health care services and procedures are making a difference to patient health by providing insight into the effectiveness of care from a patient's perspective

Patient-Centred & Evidence-Based

Complement Traditional Patient Data

Measuring Patients' Views

Comparative Reporting and Benchmarking

Screening for Sleep Problems in Ontario

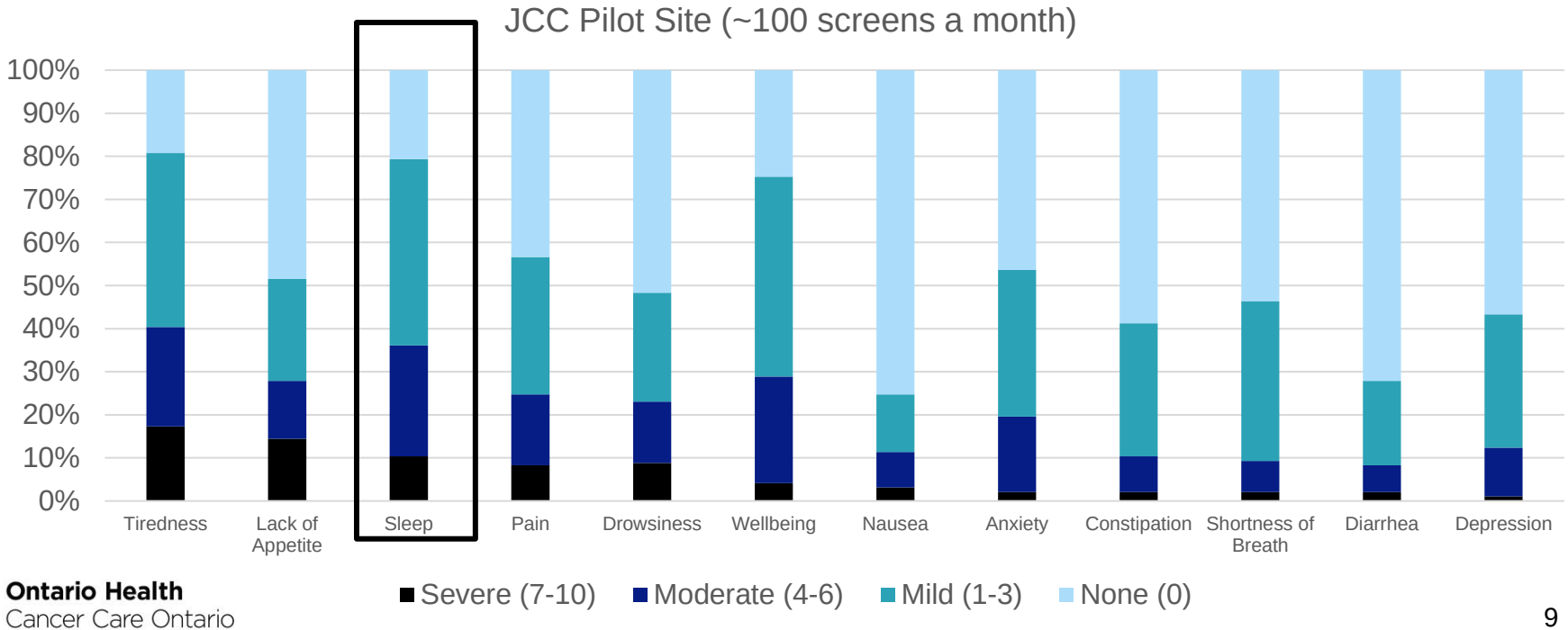
- It is estimated that **25-59%** of people undergoing cancer treatment experience sleep problems

Pilot Project

- In 2020, Ontario Health piloted at two cancer centres in the radiation review clinic, the addition of sleep, constipation, and diarrhea to ESAS-r+ (9-item tool) to evaluate patient and provider satisfaction and feasibility
  - Over **90%** of patients reported it was important to be asked about the additional symptoms
  - There is evidence in the literature to support the addition of sleep to ESAS-r+ (Hannon et al. 2015 & Johnston et al. 2017)

Sleep Problems Are Common in People Undergoing Cancer Treatment

Pilot Project Results



Screening for Sleep Problems in Ontario

Pilot Project Results

- ESAS-r+ put sleep *"on the radar"* for those that normally didn't ask about it
- Challenge: May identify chronic sleep issues that have to be distinguished from new cancer/treatment-related:

> *"…getting familiar with what a normal score is for a patient…and what is changing based on our intervention…you don't know what their baseline is [prior to cancer diagnosis]."*

Screening for Sleep Problems in Ontario

Provincial Implementation of ESAS-r+

- Beginning June 2022, the phased implementation of ESAS-r+ (12-item PROM) began to enable the early identification of constipation, diarrhea and sleep issues
- This webinar is intended to support clinicians to assess and respond to sleep problems identified on ESAS-r+

Case Example: Evelyn, Age 64

- Stage II, estrogen & progesterone positive
- Adjuvant chemotherapy treatment plus aromatase inhibitor
- Complains of difficulty falling asleep, daytime sleepiness with six awakenings per night with hot flashes, myalgia
- Naps 2-3 times/day,
- Severe sleep score (8 on ESAS-r+)

Poll Question 1:

64 y/o Evelyn is undergoing tamoxifin treatment for breast cancer and is having difficulties with sleep. Would you recommend Ambien to be used on an as needed basis?

- Yes
- No

Poll Question 2:

How comfortable are you assessing and managing sleep problems for people undergoing cancer treatment?

- 1 (not comfortable at all)
- 5 (very comfortable)

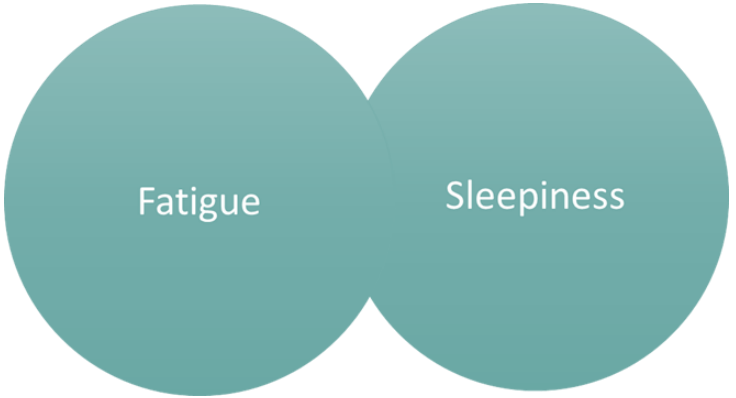
Assessment of Insomnia in Cancer Patients

Dr. Tyler Tulloch

What is Normal Sleep?

- Preceded by feeling of sleepiness
- Sleep onset latency 10-30 minutes
- Awake < 30 minutes during the night
- Occurs around the same time of night each night of the week
- Lighter sleep just before usual rise time
- Feeling refreshed 1 hour after rising

Fatigue vs. Sleepiness



Fatigue	Sleepiness
Low energy	Difficulty staying awake
Depends on level of exertion	Depends on length of time awake
Not more likely to fall asleep	Likely to fall asleep

Assessment Tools

- Insomnia Severity Index (ISI)
  - Subjective insomnia severity (screening and outcome monitoring)
- Epworth Sleepiness Scale (ESS)
  - Daytime sleepiness (screening, safety and outcome monitoring)
- Sleep Diary
  - Prospective, detailed monitoring of sleep patterns (focused assessment, treatment planning, and outcome monitoring)

Insomnia Severity Index

Name: _____

Date: _____

1. Please rate the current (i.e. last 2 weeks) SEVERITY of your insomnia problem(s)

	None	Mild	Moderate	Severe	Very
Difficulty falling asleep:	0	1	2	3	4
Difficulty staying asleep:	0	1	2	3	4
Problem waking up too early:	0	1	2	3	4

2. How SATISFIED/dissatisfied are you with your current sleep pattern?

Very satisfied				Very dissatisfied
0	1	2	3	4

3. To what extent do you consider your sleep problem to INTERFERE with your daily functioning (e.g. daytime fatigue, ability to function at work/daily chores, concentration, memory, mood, etc).

Not at all interfering	A little	Somewhat	Much	Very much interfering
0	1	2	3	4

4. How NOTICEABLE to others do you think your sleeping problem is in terms of impairing the quality of your life?

Not at all noticeable	Barely	Somewhat	Much noticeable	Very much
0	1	2	3	4

5. How WORRIED/distressed are you about your current sleep problem?

Not at all	A little	Somewhat	Much	Very much
0	1	2	3	4

Epworth Sleepiness Scale

Epworth Sleepiness Scale

Name: _____ Today's date: _____

Your age (Yrs): _____ Your sex (Male = M, Female = F): _____

How likely are you to doze off or fall asleep in the following situations, in contrast to feeling just tired?

This refers to your usual way of life in recent times.

Even if you haven't done some of these things recently try to work out how they would have affected you.

Use the following scale to choose the **most appropriate number** for each situation:

0 = would **never** doze
1 = **slight chance** of dozing
2 = **moderate chance** of dozing
3 = **high chance** of dozing

It is important that you answer each question as best you can.

Situation	**Chance of Dozing (0-3)**
Sitting and reading	
Watching TV	
Sitting, inactive in a public place (e.g. a theatre or a meeting)	
As a passenger in a car for an hour without a break	
Lying down to rest in the afternoon when circumstances permit	
Sitting and talking to someone	
Sitting quietly after a lunch without alcohol	
In a car, while stopped for a few minutes in the traffic	

THANK YOU FOR YOUR COOPERATION

Sleep Diary

- Sleep onset latency
- Number of awakenings
- Wakefulness after sleep onset
- Sleep efficiency

Consensus Sleep Diary-Core ID/Name:___________________

	Sample							
Today's date	4/5/11							
1. What time did you get into bed?	10:15 p.m							
2. What time did you try to go to sleep?	11:30 p.m							
3. How long did it take you to fall asleep?	55 min.							
4. How many times did you wake up, not counting your final awakening?	3 times							
5. In total, how long did these awakenings last?	1 hour 10 min.							
6. What time was your final awakening?	6:35 a.m.							
7. What time did you get out of bed for the day?	7:20 a.m							
8. How would you rate the quality of your sleep?	☐ Very poor ☒ Poor ☐ Fair ☐ Good ☐ Very good	☐ Very poor ☐ Poor ☐ Fair ☐ Good ☐ Very good	☐ Very poor ☐ Poor ☐ Fair ☐ Good ☐ Very good	☐ Very poor ☐ Poor ☐ Fair ☐ Good ☐ Very good	☐ Very poor ☐ Poor ☐ Fair ☐ Good ☐ Very good	☐ Very poor ☐ Poor ☐ Fair ☐ Good ☐ Very good	☐ Very poor ☐ Poor ☐ Fair ☐ Good ☐ Very good	☐ Very poor ☐ Poor ☐ Fair ☐ Good ☐ Very good
9. Comments (if applicable)	I have a cold							

Consensus Sleep Diary-M Continued **ID/NAME:** _____

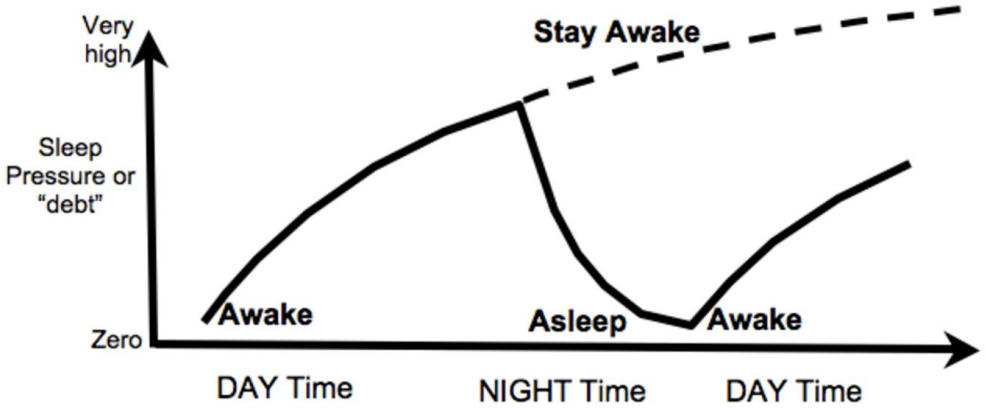
	Sample							
Today's Date	4/5/11							
11a. How many times did you nap or doze? 11b. In total, how long did you nap or doze?	2 times 1 hour 10 min.							
12a. How many drinks containing alcohol did you have? 12b. What time was your last drink?	3 drinks 9 :20 p.m.							
13a. How many caffeinated drinks (coffee, tea, soda, energy drinks) did you have? 13b. What time was your last drink?	2 drinks 3 :00 p.m.							
14. Did you take any over-the-counter or prescription medication(s) to help you sleep? If so, list medication(s), dose, and time taken	☑ Yes ☐ No Medication(s): Relaxo-Herb Dose: 50 mg Time(s) taken: 11 pm	☐Yes ☐No Medication(s): Dose: Time(s) taken:	☐Yes ☐No Medication(s): Dose: Time(s) taken:	☐Yes ☐No Medication(s): Dose: Time(s) taken:	☐Yes ☐No Medication(s): Dose: Time(s) taken:	☐Yes ☐No Medication(s): Dose: Time(s) taken:	☐Yes ☐No Medication(s): Dose: Time(s) taken:	☐Yes ☐No Medication(s): Dose: Time(s) taken:
15. Comments (if applicable)	I have a cold							

Two-Process Model of Sleep (Borbely, 1982)

- Sleep Drive (homeostatic process)
- Circadian Rhythm (circadian process)

Sleep Drive/Homeostatic Process

- Biological drive/pressure to sleep
- What strengthens and weakens sleep drive?
  - Napping
  - Sleeping in
  - Inactivity/sedentary lifestyle
  - Caffeine



Circadian Process

- 24(ish) hour cycle to coordinate mental/physical systems
  - Including sleep, hunger, energy
- Internal process, but reset by daylight, wakefulness, activity
- Chronotype (early bird vs. night owl)
- Impacts alertness, cognition, endocrine system, body temperature

Factors that Impact Circadian Process

- Irregular bed/wake times
- Spending too much time in bed
- Blue-spectrum light toward bedtime
- Insufficient blue-spectrum light mornings/daytimes

Other Factors Impacting Sleep

- Conditioned arousal
  - Using the bedroom for activities other than sleep (e.g., watching TV, reading, using phones/tablets, tossing/turning, worrying, dialysis)
- General hyperarousal
  - Anxiety, worry, muscle tension, alertness
- Cognitive arousal about sleep
  - Worrying about sleep problem and consequences of poor sleep
- Sleep effort (trying too hard to fall asleep)

Additional Contributing Factors in Cancer Populations

(Howell et al., 2014)

Predisposing	Precipitating	Perpetuating
• Female gender • Older age • Hyperarousability • Personal or family history • Mood or anxiety disorder	• Cancer treatments that alter inflammatory cytokine levels or disrupt circadian rhythms/sleep-wake cycles • Side effects of cancer treatment • Cancer-related distress • Menopausal symptoms • Comorbid symptoms (pain/fatigue)	• Excessive daytime sleeping • Maladaptive cognitions (unhelpful beliefs about sleep) • Long-term and/or inappropriate medication use

Poor Sleep Hygiene

- Caffeine intake (within 5 hours of bedtime)
- Alcohol/substance use before bed
- Exercise too close to bedtime
- Noisy, bright, uncomfortable sleep environment

Management of Insomnia in Cancer Patients

Dr. Tyler Tulloch

General Tips

- Match strategies to identified problem areas
  - Sleep drive, circadian rhythm, arousal, sleep hygiene, medical comorbidities
- Address medical comorbidity affecting sleep
  - Consider timing of medications, pain management
- Refer for cognitive behavioural therapy for insomnia (CBT-I) if initial management unsuccessful
  - Gold standard treatment for insomnia disorder

Strategies to Build Sleep Drive

- Sleep restriction (limit time spent in bed to match two-week average total sleep time)
- A short nap (limiting naps to 20 minutes, no longer than 30 minutes)
- Schedule regular physical activity; tailor to patient ability
  - Consider limitations due to pain, mobility, medical conditions
- Reduce caffeine intake; eliminate within 5 hours of bedtime

Strategies to Regulate Circadian Rhythm

- Wake at the same time 7 days/week
  - Use an alarm if needed
- Get plenty of sunlight upon waking and throughout the day
  - Open blinds and/or use blue light box
- Avoid blue spectrum light from electronic devices before bed
  - Turn on “night mode” for handheld devices; sit > 6 feet away from TV
- Consider melatonin under advice of a physician/NP

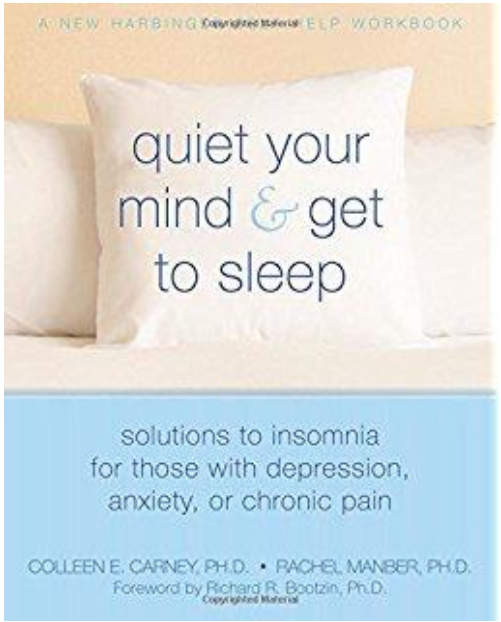
Strategies to Reduce Arousal

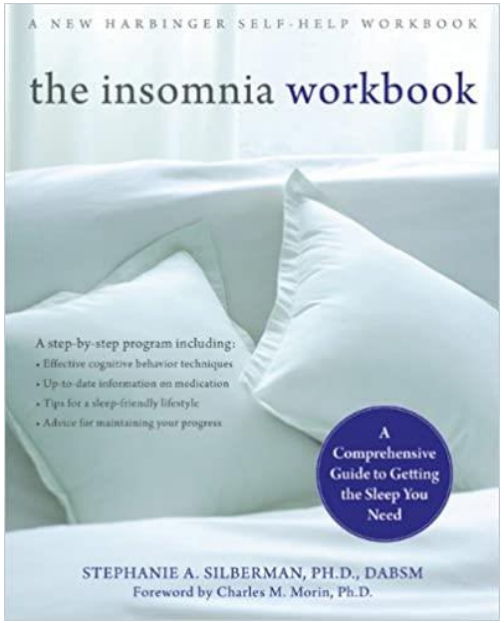
- Learn and regularly practice relaxation strategies
  - Diaphragmatic breathing; progressive muscle relaxation; guided imagery
- Use the bedroom only for sleeping (stimulus control)
  - Do everything else in another room if possible
  - Only get into bed when sleepy; get back out of bed if unable to sleep after 20 minutes
- Schedule “worry time” several hours before bed
  - Plan to get the worries out of your system well before bed; write down worries and begin problem solving issues within your control

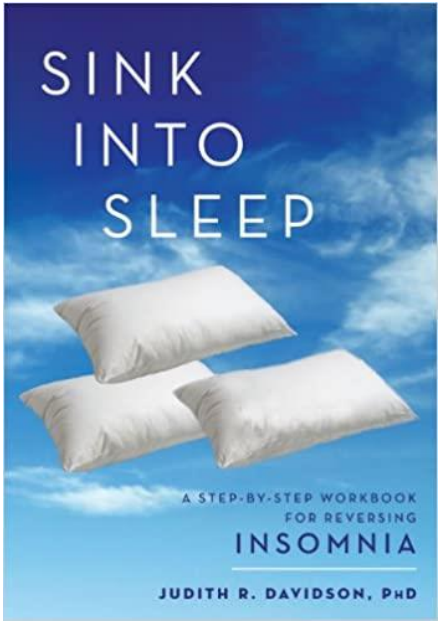
Other Sleep Hygiene Tips

- Avoid alcohol before bed
- Keep bedroom cool, dark, and quiet
- Have a light snack before bed to ward off hunger
- Schedule wind-down period 30 min before bed (calming activities; no electronics)
- Dim lights leading up to bedtime

Self-Help Resources





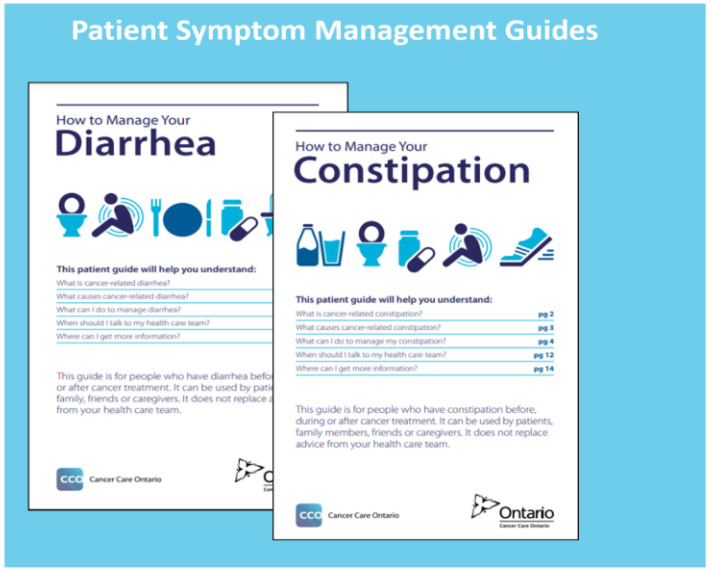


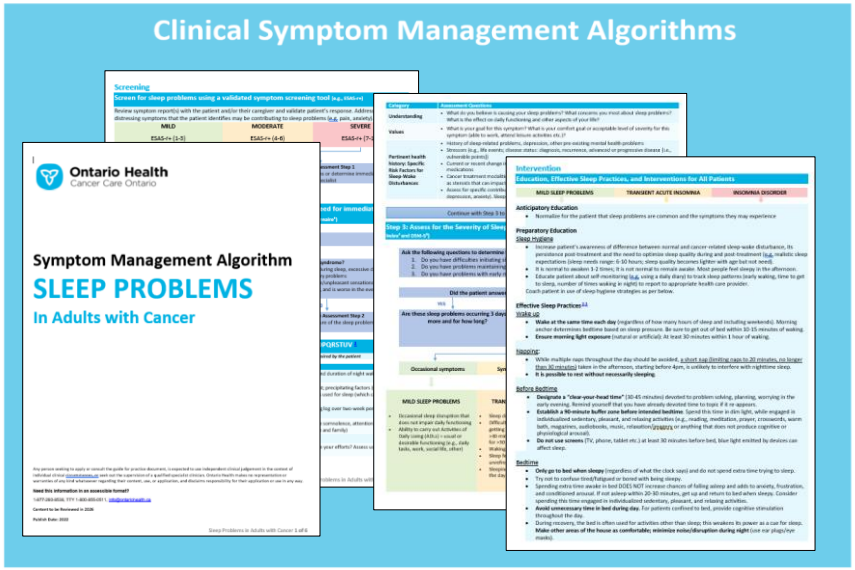
Responding to Sleep Disturbance in Routine Clinical Practice

Dr. Doris Howell

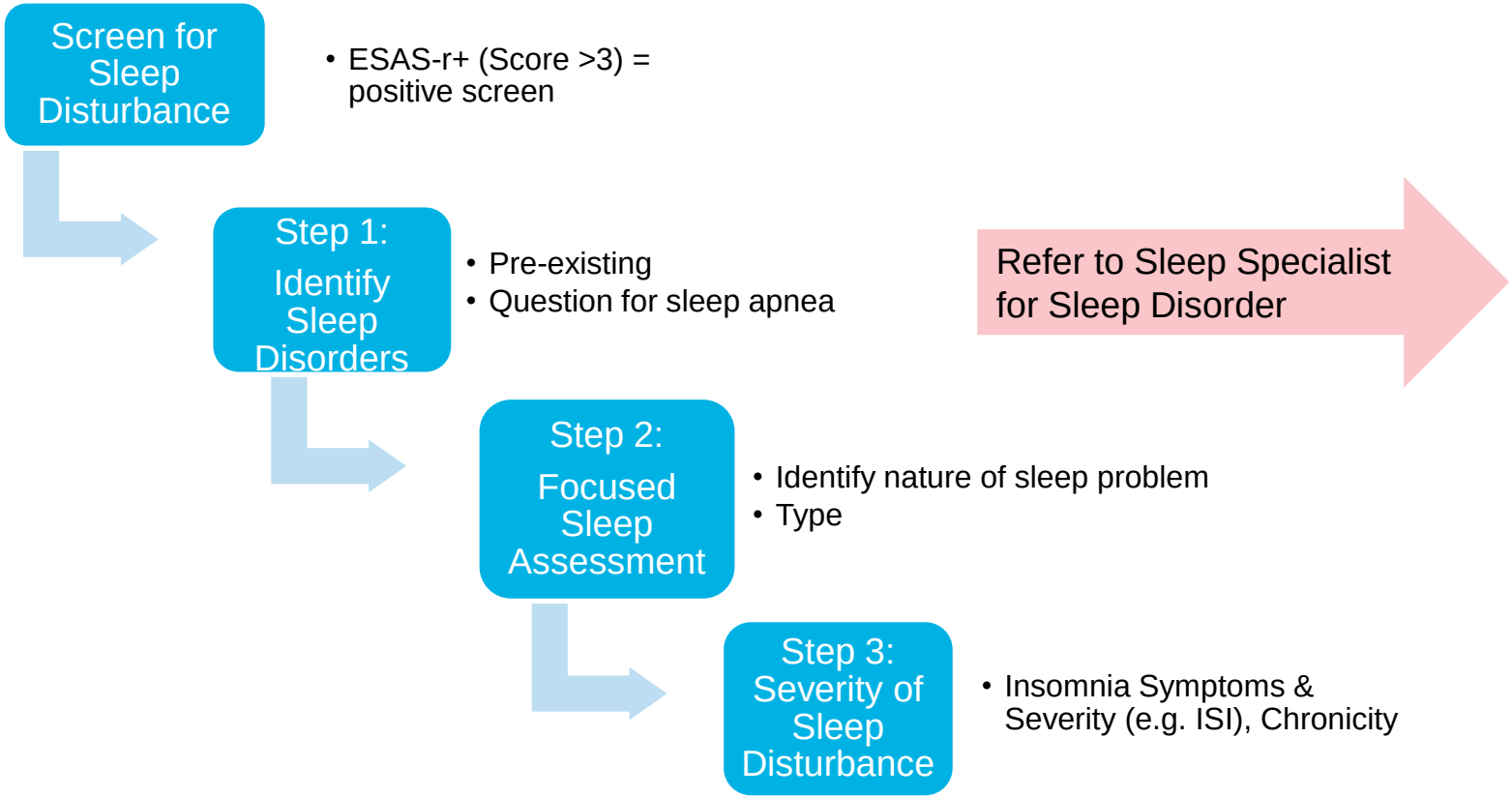
Symptom Management Guides and Algorithms

- Tools are created and maintained to help patients manage their own symptoms and help providers appropriately respond to PROMs
  https://www.cancercareontario.ca/en/symptom-management

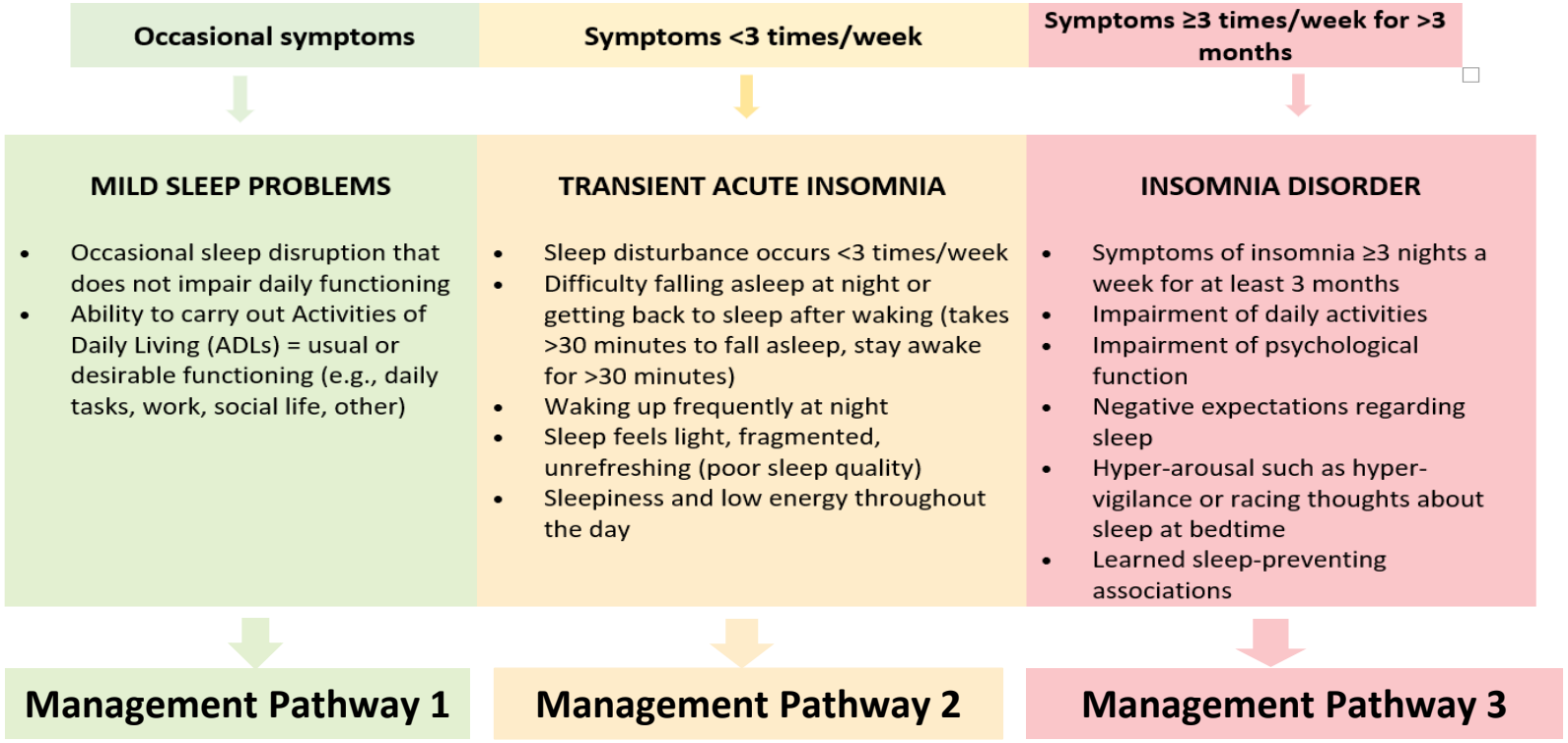




Guideline: Steps in Assessment Process



Nature and Type of Sleep Disorder



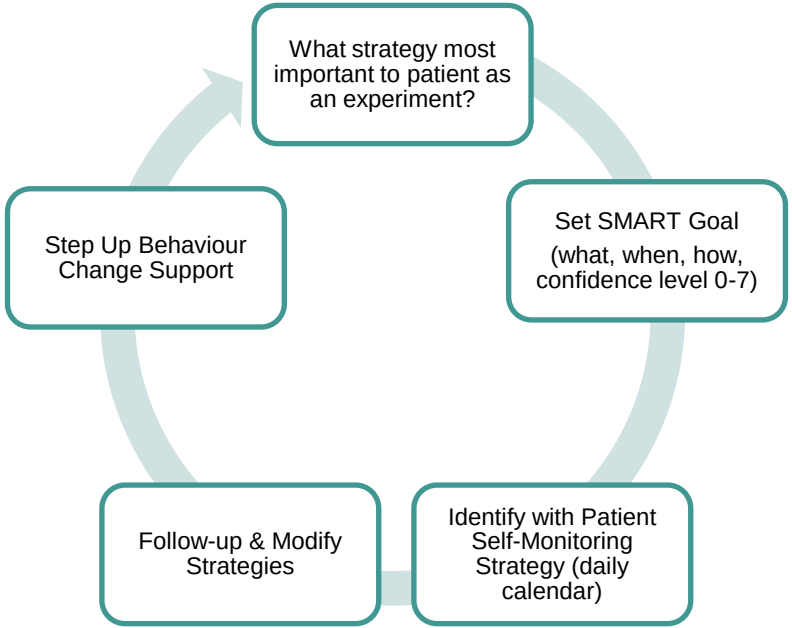
Management Pathways

Mild Sleep Disturbance	• Patient education and written materials • Patient self-referral to resources
Transient Insomnia	• Sleep hygiene education & goal setting • Non-pharmacological interventions • Advise re: Choosing Wisely re: medications
Insomnia Disorder	• Sleep Hygiene plus referral to specialist for CBT-I • CBT-I online resources depending on access

Management Pathway 1-Mild for All Patients

Anticipatory Education: Normalize sleep disturbance comorbid with cancer-encourage ESAS-r+ completion for early detection

Preparatory Education: healthy sleep practices as part of healthy lifestyle-integrate in Tx education (written/verbal & add to portal).

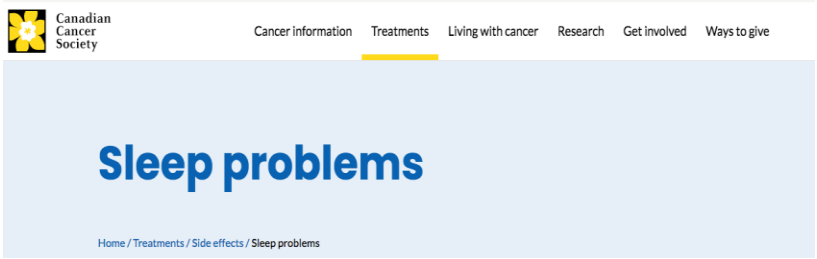


Web-Based Education Resources

SleepEducation.org | Sleep Health Information

The AASM's Sleep Education website provides accurate patient education information. Visit sleepeducation.org to learn about healthy sleep and sleep disorders. The site also has a searchable directory of AASM-accredited sleep centers across the nation.

- **Canadian Sleep Society**
  Website: https://css-scs.ca
- **MedlinePlus:** Your Guide to Healthy Sleep
  Website: www.nlm.nih.gov/medlineplus/sleepdisorders.html



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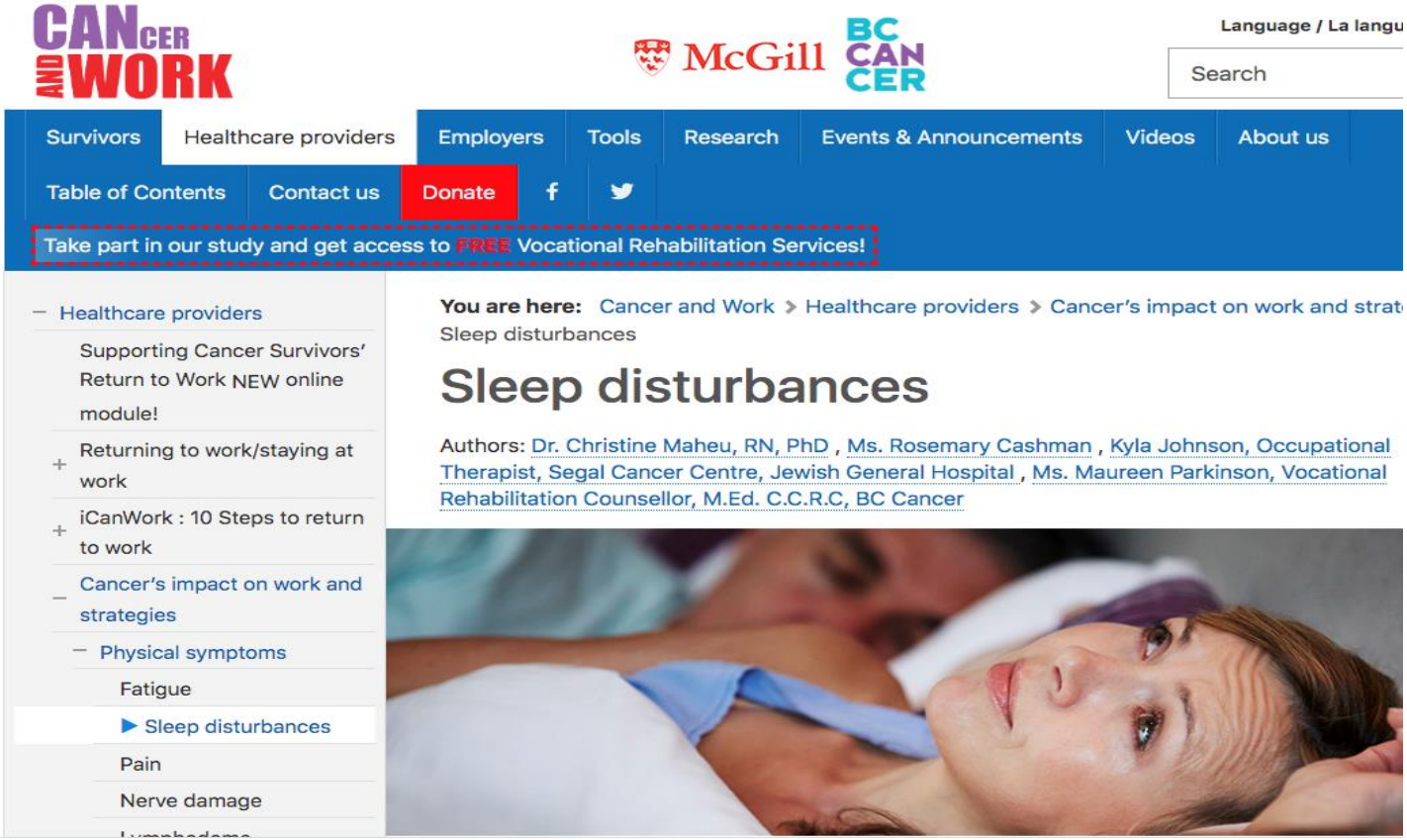
CANCER AND WORK
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Supporting Cancer Survivors' Return to Work NEW online module!
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iCanWork : 10 Steps to return to work
Cancer's impact on work and strategies
Physical symptoms
Fatigue
Sleep disturbances
Pain
Nerve damage
You are here: Cancer and Work > Healthcare providers > Cancer's impact on work and strat
Sleep disturbances
Sleep disturbances
Authors: Dr. Christine Maheu, RN, PhD , Ms. Rosemary Cashman , Kyla Johnson, Occupational Therapist, Segal Cancer Centre, Jewish General Hospital , Ms. Maureen Parkinson, Vocational Rehabilitation Counsellor, M.Ed. C.C.R.C, BC Cancer

Management Pathway 2 and 3

Transient Acute Insomnia

Insomnia Disorder

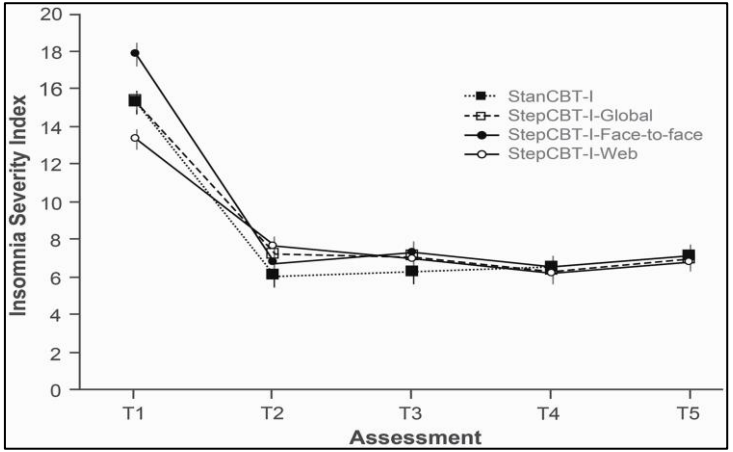
**Manage co-morbid problems

Non-Pharmacological Interventions

1. Sleep hygiene plus
2. Relaxation therapies (e.g. meditation, progressive
3. Physical activity (yoga, walking, swimming, etc).

Choosing Wisely Recommendations for Sleep Meds-Advised not to use

CBT-Insomnia First Line Treatment



Sleep, Volume 44, Issue 11, November 2021, zsab166, https://doi.org/10.1093/sleep/zsab166

Case Example: Evelyn, Age 64

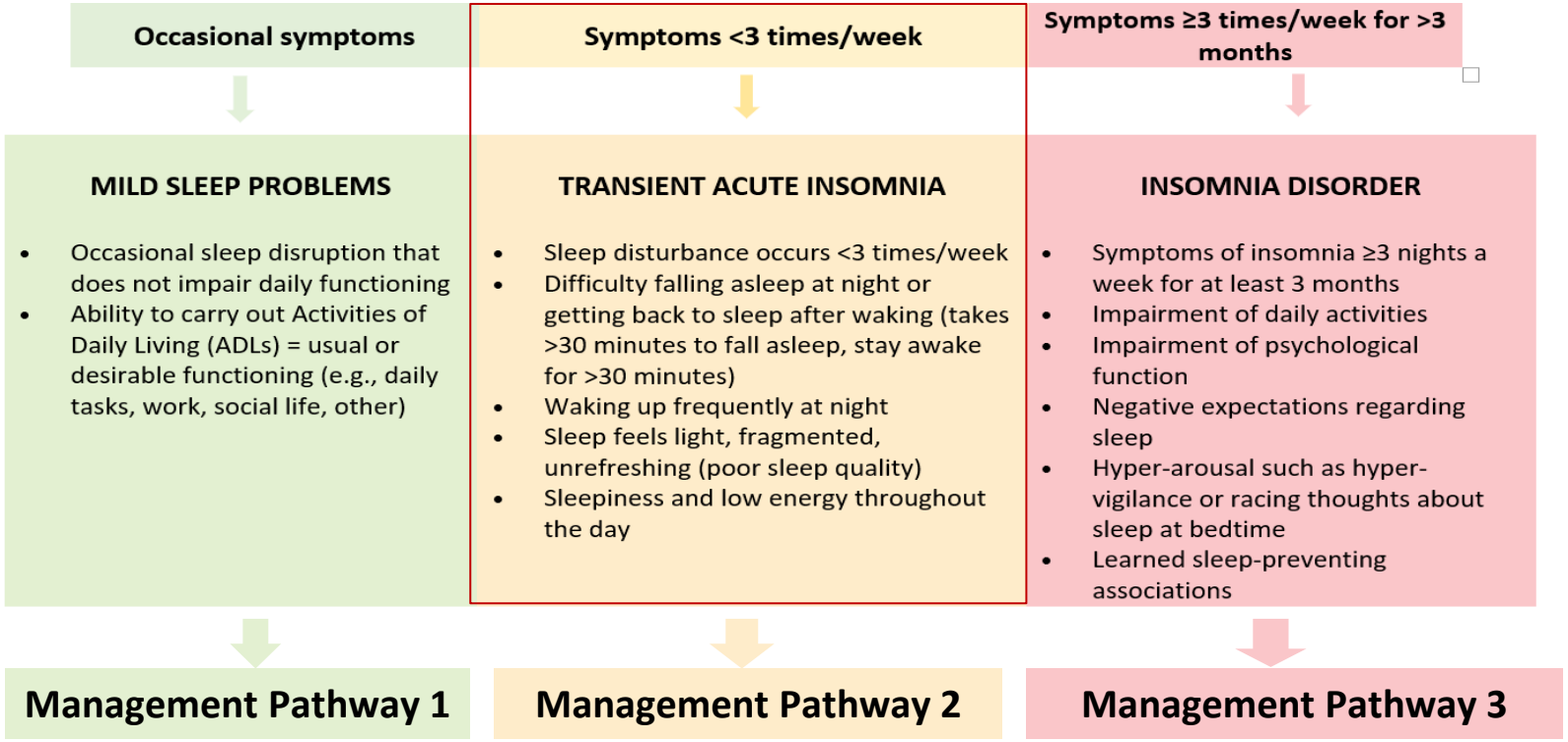
- Stage II, estrogen & progesterone positive
- Adjuvant chemotherapy treatment plus aromatase inhibitor
- Complains of difficulty falling asleep, daytime sleepiness with six awakenings per night with hot flashes, myalgia
- Naps 2-3 times/day,
- Severe sleep score (8 on ESAS-r+)

Complete Clinical Assessment

Steps in Assessment

- **Step 1:** Screen positive on ESAS-r+ for sleep (Score 4).
- **Step 2**: Ruled out pre-existing sleep disorders or apnea
- **Step 3**: OQPRSTUV
  - O: Onset at Rx start
  - Q: Quality-difficulty falling asleep, non-restorative sleep
  - P: Precipitators- long naps, hot flashes, pain
  - R: Related Symptoms: fatigue
  - S: Severity: worries sleep will worsen cancer
  - T: Treatment: taking OTC sleeping pills
  - U: Understanding: does not think anything will help, just tolerate
  - V: Value: needs to function for part-time job
- **Step 4:** ISI Severity <16, difficulty falling asleep, early waking, waking during night less than < 3 days per week, able to function in day.

Nature and Type of Sleep Disorder



Response: Management Pathway 2:

- 1) Sleep hygiene education
  - SMART Goal-I will avoid screens an hour before bed 5 times per week, and confidence level 7
  - Coach re: shorter rest periods, manage fatigue
  - Cool bedroom, darkened room.
- 2) Specific strategies to manage hot flashes & myalgia-pain relief and medication/self-guided CBT
- 3) Coach in use of non-pharmacological interventions: meditation and yoga
- 4) Advise re: stopping OTC medication
- 5) Self-monitoring with daily diary with follow-up at next clinic visit or phone.

Case 2: Peter, Age 42

- Metastatic colorectal cancer
- Targeted therapy with Encorafenib (Brafovi)
- Fatigue, unable to function during day with cognitive impairment-had to take work leave
- Diarrhea, skin rashes with itching intolerable
- Problems with managing stress & insomnia symptoms
- ESAS-r+ anxiety & depression (Score 8)

Complete Clinical Assessment

Steps in Assessment

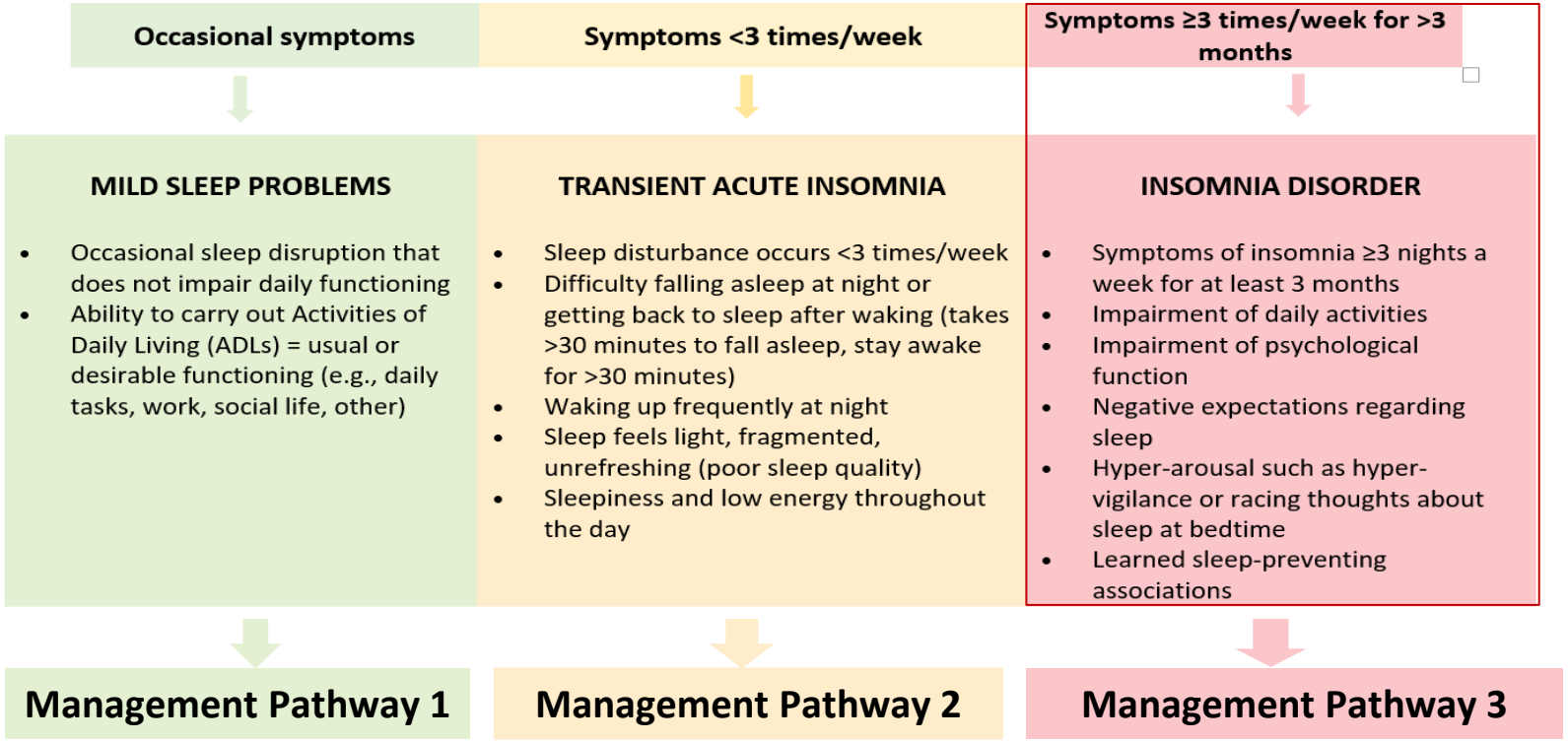
- **Step 1: Screening:** Screen positive on ESAS-r+ for sleep (Score 8).

- **Step 2: Ruled Out**: pre-existing sleep disorders/apnea

- **Step 3**: Focused Assessment (OQPRSTUV)
  - O-Onset with a stressful job three years ago and initial DX
  - Q-difficulty falling asleep, wakes during night, early waking
  - P-precipitated by stress, anxiety, depression (see ESAS-r+ score)
  - R-fatigue, impairment in daytime functioning
  - S-ruminates about not being able to sleep
  - T-taking Ativan prescribed by GP
  - U-does not think anything will help, long term problem
  - V-needs to function in daytime as single father and needs work

- **Step 4:** ISI Severity (>16). >3 nights/week of early waking, difficulty going to sleep, wakes during night, rumination & hypervigilant.

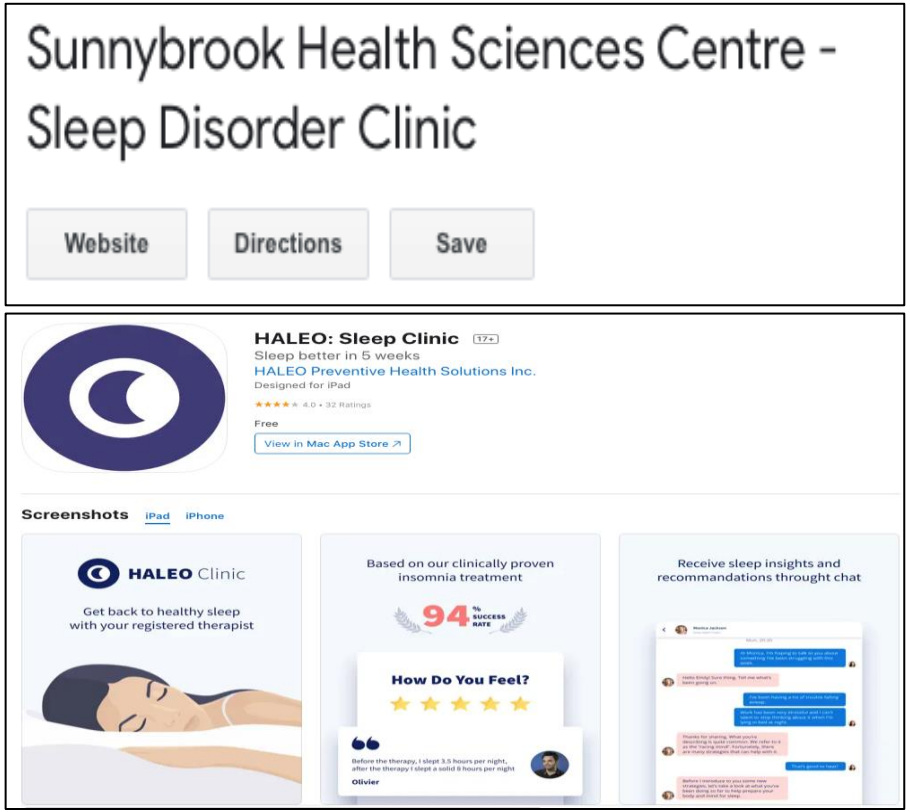
Nature and Type of Sleep Disorder



Response: Management Pathway 3

- 1) Sleep hygiene plus
  - Goal: I will meditate for 10 minutes using a guided meditation on the CALM app 3 times per week (mon, wed, fri), confidence is 7
- 2) Best practices for management of skin rashes & diarrhea
- 3) Management plan for co-morbid anxiety and depression-inclusive of referral to social worker or psychologist/psychiatrist
- 4) Cognitive behavioural therapy for insomnia-use of web-based resources----requires referral to specialist skilled in CBT-I or a comprehensive sleep clinic

CBT-I Resources



Summary

- PROMs are useful for screening for sleep problems
- ESAS-r+ is a screen and is followed by systematic assessment
- Guidelines provide a knowledge product to ensure consistency in practice-sleep is a priority as can affect survival
- Facilitated implementation and integration in clinical workflow key to practice uptake

Closing

Dr. Natalie Coburn

Poll Question 3:

After participating in today's webinar, how comfortable are you assessing and managing sleep problems for people undergoing cancer treatment?

- 1 (not comfortable at all)
- 5 (very comfortable)

Evaluation Poll

Please rate your satisfaction with this event:

- Very satisfied
- Somewhat satisfied
- Neutral
- Somewhat dissatisfied
- Very dissatisfied

Contact Information

If you have any questions regarding the symptom management resources, please email the Symptom Management Program, Cancer Clinical Programs at OH-CCO_SymptomManagement@ontariohealth.ca