

# BC Surgical Prehabilitation Toolkit

**SURGICAL PATIENT  
OPTIMIZATION COLLABORATIVE**

APRIL 2022 · V.5

**SSC**  
SPECIALIST SERVICES  
COMMITTEE

## PREHABILITATION TOOLKIT

This toolkit includes primary drivers and change ideas which may be used for surgical patient prehabilitation.



Watch Video  
**BC Surgical  
Prehabilitation  
Overview**

## TOOLKIT **OBJECTIVE**

To improve patients' surgical outcomes and experiences through mental and physical preparation prior to surgery.

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# WELCOME

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Welcome to the BC Surgical Prehabilitation Toolkit. This toolkit was created by the BC Surgical Optimization Working Group and vetted by 15 provincial sites involved in the Surgical Patient Optimization Collaborative (SPOC). SPOC is a provincial collaborative, bringing care teams from across the province together in the pursuit of improving patients' readiness for elective surgery.

## **Introduction to the Surgical Patient Optimization Collaborative (SPOC)**

### Background

After successful implementation of the Enhanced Recovery After Surgery (ERAS) Collaborative, a Doctors of BC and Specialist Services Committee initiative that aimed to improve outcomes for elective colorectal surgery patients in 2015-16, there was widespread specialist interest in continuing to improve surgical patient outcomes across different types of surgery. This impetus, along with literature highlighting the significant impact prehabilitation can have on improving patients' surgical outcomes, led to the initiation of the Surgical Patient Optimization Collaborative (SPOC) launched in May of 2019.

### The Collaborative

In May 2019 SPOC launched in 15 sites across the province, providing system change strategies, funding support, and shared learning to interdisciplinary teams. Quarterly learning sessions provided support as the teams worked to implement process changes based on this toolkit.

Surgical patient optimization is a multidisciplinary, structured, and personalized prehabilitation program designed to assist patients in preparing for surgery.

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Prehabilitation before major surgery can lead to a faster recovery, better patient experiences and outcomes, and savings for the health care system. Best practices for surgical prehabilitation focus on both mental and physical aspects of surgery by decreasing presurgical risk factors and increasing a patient's functional capacity. Surgical Patient Optimization Collaborative (SPOC) improves the experience for surgical patient's by:

- Using a patient-centered and multidisciplinary approach
- Supporting care providers to implement change processes
- Using preoperative surgical wait times
- Integrating available community resources
- Improving patient outcomes

### **The Toolkit**

This change toolkit is organized in a series of drivers that are important when prehabilitating patients for surgery. There are four primary drivers:

1. Activate patients in their own care;
2. Implement clinical tools to prehabilitate patients prior to surgery;
3. Introduce a refined process to allow for surgical prehabilitation, and;
4. Improve the spread and sustainability of effected change.

### **Scope**

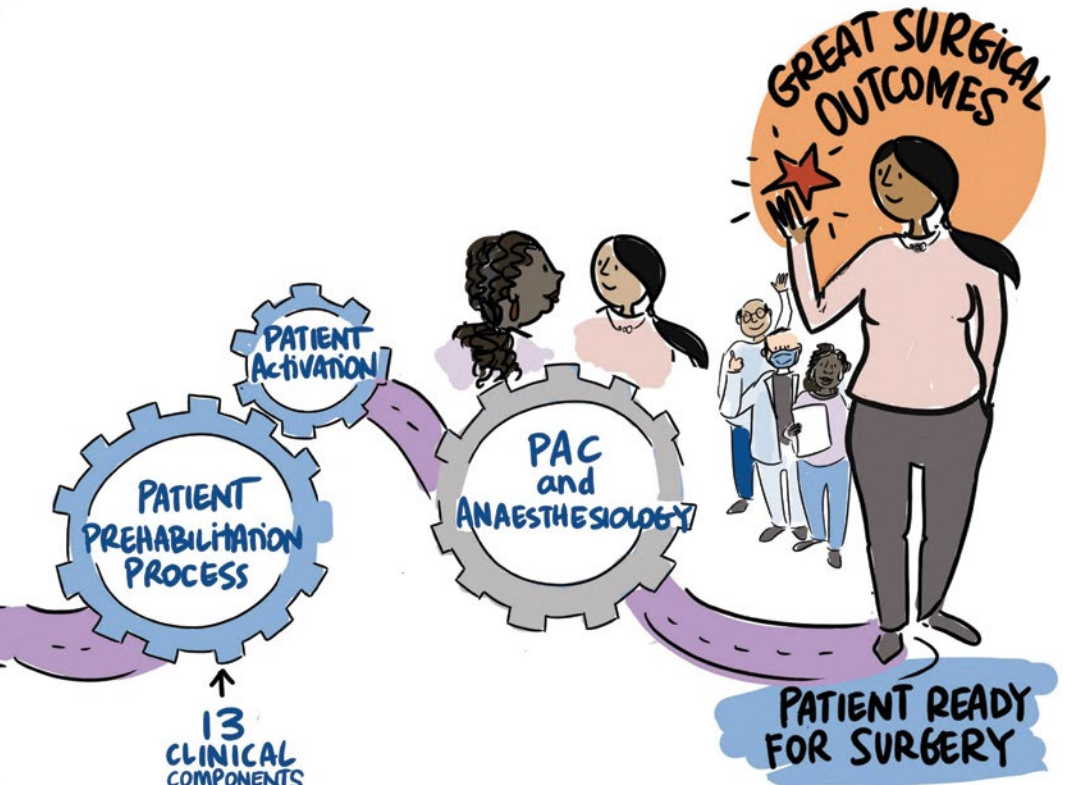
This toolkit includes primary drivers and change ideas that may prove useful for health care providers looking to prehabilitate patients before surgery. This toolkit is not meant to dictate the practice of clinicians, rather to provide options that are available to both providers and patients throughout British Columbia. Clinicians are encouraged to use the toolkit at their own discretion based on the best interest of the patient.

# PATIENT SURGICAL PREHABILITATION JOURNEY

Aim: To improve patients' surgical outcomes by optimizing their mental and physical health before surgery.







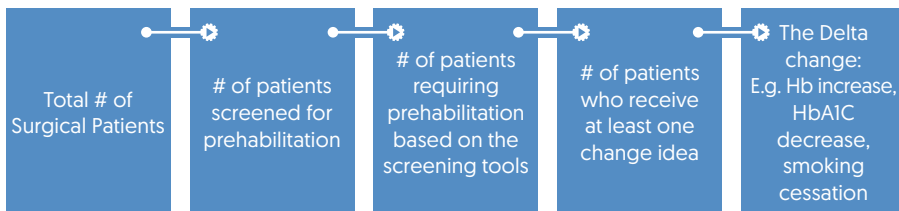
**13**  
CLINICAL  
COMPONENTS

- SOCIAL SUPPORTS
- SLEEPAPNEA
- ANXIETY
- FRAILTY
- OBESITY
- GLYCEMIC CONTROL
- PHYSICAL ACTIVITY
- SMOKING CESSATION
- PAIN MANAGEMENT
- SUBSTANCE ABUSE
- ANEMIA
- CARDIAC
- NUTRITION

Prehabilitation helps improve these components of a patient's health

## Prehabilitation Performance Indicators

The following measures can be used as indicators to alert a team of any improvement that may be needed in the process of prehabilitation.



Post-operative patient outcomes should be recorded when optimizing patients for surgery (Appendix A)

## Family and Caregiver Partners

Patient partners such as family members or other caregivers should be included as part of the prehabilitation team. To effectively involve patient partners in the prehabilitation process, the language, culture, and health literacy of both the patient and their partners should be considered.

The desired outcomes of both the patient and the patient partner should be considered when making decisions about surgery. This includes, but is not limited to, how much they would like to know about the process, what to expect from surgery, and what they expect their condition to be like after surgery.

The patient passport can be shared with the patient partner to facilitate their involvement in the prehabilitation process.

*Adapted from Agency for Clinical Innovation | The Perioperative Toolkit\**

## Implementing the Toolkit

For best chances of success in implementing the changes in this toolkit there must be appropriate planning of objectives, team member roles, and milestones. Communication with all relevant parties about the plan and the



reason for implementing the toolkit will also increase the chances of success with patient prehabilitation. Finally, assessment of the process through objective and subjective measures allows for improvement of the process and can help lead to lasting change.

*Adapted from Agency for Clinical Innovation | The Perioperative Toolkit\**

## Revisions to the Toolkit

This toolkit is a collection of the best practices and knowledge available at the time of development. Any feedback can be directed to the Specialist Services Committee, [sscbc@doctorsofbc.ca](mailto:sscbc@doctorsofbc.ca) and appropriate changes will be made to the best ability of the development team.

## KEY DEFINITIONS

### Primary Drivers

Areas of focus identified from literature which need to be addressed to create change.

### Patient Activation

A patient's understanding, ability and willingness to manage and be involved in their own health and health care.

### Clinical Components

The aspects of a patient's health that can affect surgical outcomes.

### Optimization

Synonymous with prehabilitation.

### Secondary Drivers

Factors that need to be addressed to successfully implement the primary drivers.

### Screening Tool

Assessment of a surgical patient to determine whether or not prehabilitation is needed for each clinical component.

### Change Ideas

Actionable items that health care providers can use to prehabilitate patients.

### Measurement

A measure of whether the patients selected for intervention were successfully prehabilitated.

\* [www.aci.health.nsw.gov.au/\\_\\_\\_data/assets/pdf\\_file/0010/342685/The\\_Periooperative\\_Toolkit.pdf](http://www.aci.health.nsw.gov.au/___data/assets/pdf_file/0010/342685/The_Periooperative_Toolkit.pdf)

# ACKNOWLEDGMENTS



The BC Surgical Prehabilitation Toolkit was first developed by the Specialist Services Committee of Doctors of BC in 2019, with the support and expertise of all members listed below.

Over countless hours, the following individuals came together as a working group and faculty of experts to create and refine the contents of this toolkit. We thank them for their contribution to BC health care.

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# PATIENT ACTIVATION

PRIMARY DRIVER

**Activate patients in their care**

SECONDARY  
DRIVERS

3

# CLINICAL COMPONENTS

PRIMARY DRIVER

**Implement clinical tools to prehabilitate patients prior to surgery**

SECONDARY  
DRIVERS

13

# PROCESS IMPROVEMENT

PRIMARY DRIVER

**Introduce a refined process to allow for prehabilitation**

SECONDARY  
DRIVER

1

# S·P·R·E·A·D

PRIMARY DRIVER

**Address the human aspects of change, to ensure change endures and is spread widely**

SECONDARY  
DRIVERS

6

PRIMARY DRIVER

## Activate patients in their care

SECONDARY DRIVERS

- ⦿ Assess patients' level of activation
- ⦿ Assist patients to self-manage and engage in actions supporting their health and health care
- ⦿ Implement a Shared Decision-Making process with patients



◀ **PATIENT PASSPORT FOR  
SURGICAL PREHABILITATION**

# PATIENT ACTIVATION



## Activate patients in their care

### Assess patients' level of activation

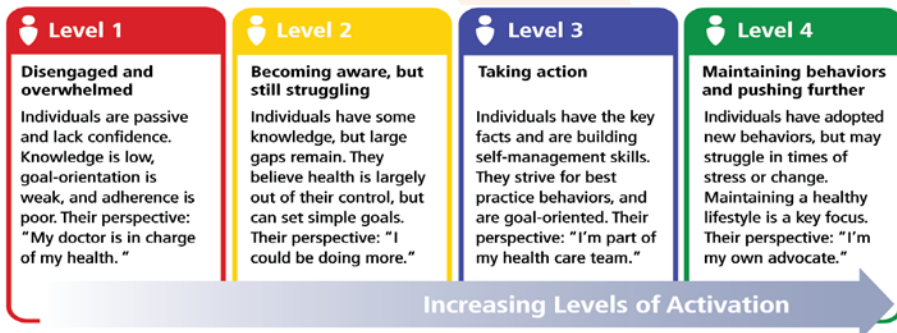
#### Change Ideas

- Understand Health Literacy
- Measure patients' Health Literacy levels [See Appendix B]
- Understand the definition of Patient Activation
- Use a Patient Activation scale in the discussion with your patients to assess their level of activation [See Appendix C]

#### Appendices

**Appendix B** · Realm-SF Score Sheet

**Appendix C** · Patient Activation Measure



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# PATIENT ACTIVATION



Activate patients in their care

Assist patients to self-manage and engage in actions supporting their health and health care

## Change Ideas

- ⚙️ Educate patients about their health condition, symptoms, surgery and prehabilitation interventions
- ⚙️ Assist patients in tracking symptoms with a symptom diary/tracker [See Appendix D]
- ⚙️ Guide patients on how to track their medications and medical records
- ⚙️ Help patients develop skills to self-manage their health and health care
- ⚙️ Encourage patients to participate in group activities that promote health and wellbeing

## Appendices

**Appendix D** · Diary of Symptoms

# PATIENT ACTIVATION



Activate patients in their care

## Implement a Shared Decision-Making process with patients

### Change Ideas

- Initiate a shared decision-making process with patients [See Appendix E]
- Set health care goals with patients [See Appendix F]
- Build a collaborative care plan with patients
- Have patients ask questions about their diagnosis, treatment & support [See Appendix G]
- Identify and action any further opportunities to improve post-surgical management

### Appendices

**Appendix E** · SHARE Approach Model

**Appendix F** · My Personal Action Plan

**Appendix G** · Ask Me 3

## PRIMARY DRIVER

# Implement clinical tools to prehabilitate patients prior to surgery

## SECONDARY DRIVERS

- ◉ Anemia
- ◉ Anxiety
- ◉ Cardiac
- ◉ Frailty
- ◉ Glycemic Control
- ◉ Nutrition
- ◉ Obesity
- ◉ Pain Management
- ◉ Physical Activity
- ◉ Sleep Apnea
- ◉ Smoking Cessation
- ◉ Social Supports
- ◉ Substance Use





# CLINICAL COMPONENTS

## Implement clinical tools to prehabilitate patients prior to surgery

### Anemia

Watch Video ▶



#### Screening Tools

- ⚙ Hemoglobin closest to surgical decision date (referral hemoglobin)
- ⚙ Ferritin closest to surgical decision date (referral ferritin)

#### Change Ideas

- ⚙ Primary Care Provider for management and investigation of anemia
- ⚙ Refer to internal medicine or hematology
- ⚙ Treatment Algorithm for Anemia
  - > Oral Iron
  - > IV Iron
  - > Erythropoietin

*\* Ensure appropriate in-hospital and post-operative follow up and care*

#### Measurements

- ⚙ Preoperative\* Hemoglobin
- ⚙ Calculate change from referral hemoglobin
- ⚙ Calculate difference from hemoglobin target

*\* post treatment*

*\* as close to surgery date as is feasible*

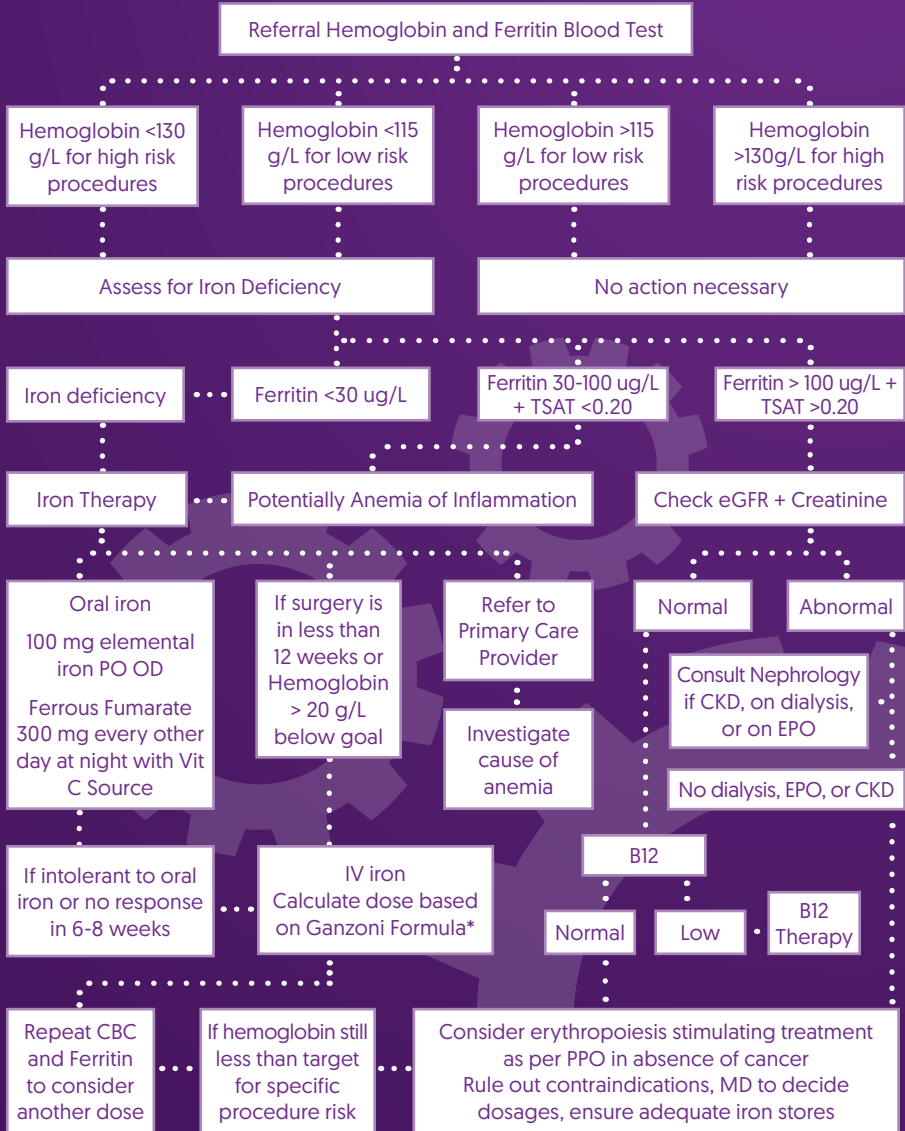
# ANEMIA TREATMENT ALGORITHM

\*Ganzoni Formula:  

$$\text{Iron Deficit [mg]} = \text{Patient Weight [kg]} \times [\text{target Hgb [g/L]} - \text{Actual Hgb [g/L]}] \times 2.4 + \text{Iron Stores [mg]}$$

High risk: Historic Transfusion Rate of greater than 5-10%

Low Risk: Historic Transfusion Rate of less than 5-10%





# CLINICAL COMPONENTS



## Implement clinical tools to prehabilitate patients prior to surgery

### Anxiety

Watch Video ▶



#### Screening Tools

- All patients should be optimized for pre-operative anxiety

#### Change Ideas

- Primary Care Provider assessment for preliminary counselling, coordinating referrals and additional resources
- Psychiatrist/psychologist assessment
- Meditation, mindfulness, or other relaxation practices
- Pre-operative discussion with the patient about upcoming procedure and any related worries
- Workplace wellness programs
- Heretohelp.bc.ca
- BounceBackBC
- anxietycanada.com

*\* Ensure appropriate in-hospital and post-operative follow up and care*

#### Measurements

- Patient reported adequate supports in place prior to surgery





# CLINICAL COMPONENTS



## Implement clinical tools to prehabilitate patients prior to surgery

### Cardiac

Watch Video ▶



#### Screening Tools

- Revised Cardiac Risk Index

#### Change Ideas

- BNP or NT-proBNP

If pre-operative BNP  $\geq 92$  ng/L,  
or NT-proBNP  $\geq 300$ ng/L

**OR** If no pre-operative BNP or NT-proBNP  
available but patient has met the criteria  
for screening

**Then Obtain:** ECG on arrival in PACU

Troponin on arrival in PACU & on postoperative days 1, 2, and 3

- Primary Care Provider to arrange lab investigations and refer to cardiology if BNP is elevated. Post-op follow up by Primary Care Provider is also warranted.
- Cardiac Treatment algorithm

*\* Ensure appropriate in-hospital and post-operative follow up and care*

#### Measurements

- One or more change ideas completed

# CARDIAC ALGORITHM



## PATIENTS

Patients age is  $\geq 45$  yrs, or 18-44 yrs with known significant cardiovascular disease undergoing non-cardiac surgery requiring overnight hospital admission

## TIMING OF SURGERY

Elective Surgery

## PREOPERATIVE ASSESSMENT

Assessment of pre-operative risk using RCRI

If a patient's age is  $\geq 65$  yrs, RCRI  $\geq 1$  or age 45-64 yrs with significant cardiovascular disease  
▶ order NT - proBNP/BNP

Positive NT - proBNP  $\geq 300$  ng/L or BNP  $\geq 92$  ng/L

NT - proBNP or BNP not available

Negative NT - proBNP  $< 300$  ng/L or BNP  $< 92$  ng/L

## POSTOPERATIVE MONITORING

Measure Troponin daily x 48 - 72 hrs  
Obtain ECG in PACU  
Consider in-hospital shared-care management

Post-operative follow up by Primary Care Provider for management and investigation of cardiac disease

No additional routine post-operative monitoring

# CARDIAC SCREENING TOOL

## Revised Cardiac Risk Index



### Revised Cardiac Risk Index for Pre-Operative Risk ☆

Estimates risk of cardiac complications after noncardiac surgery.

#### INSTRUCTIONS

Note: this content was updated January 2019 to reflect the substantial body of evidence, namely external validation studies, suggesting that the original RCRI had significantly underestimated the risk (see [Evidence](#) for more).

When to Use ▾

Pearls/Pitfalls ▾

Why Use ▾

<b>High-risk surgery</b> Intraoperative; intrathoracic; suprainguinal vascular	No 0	Yes +1
<b>History of ischemic heart disease</b> History of myocardial infarction (MI); history of positive exercise test; current chest pain considered due to myocardial ischemia; use of nitrate therapy or ECG with pathological Q waves	No 0	Yes +1
<b>History of congestive heart failure</b> Pulmonary edema, bilateral rales or S3 gallop; paroxysmal nocturnal dyspnea; chest x-ray (CXR) showing pulmonary vascular redistribution	No 0	Yes +1
<b>History of cerebrovascular disease</b> Prior transient ischemic attack (TIA) or stroke	No 0	Yes +1
<b>Pre-operative treatment with insulin</b>	No 0	Yes +1
<b>Pre-operative creatinine &gt;2 mg/dL / 176.8 μmol/L</b>	No 0	Yes +1







## Implement clinical tools to prehabilitate patients prior to surgery

### Frailty

Watch Video ▶



#### Screening Tools

- Clinical Frailty Scale

#### Change Ideas

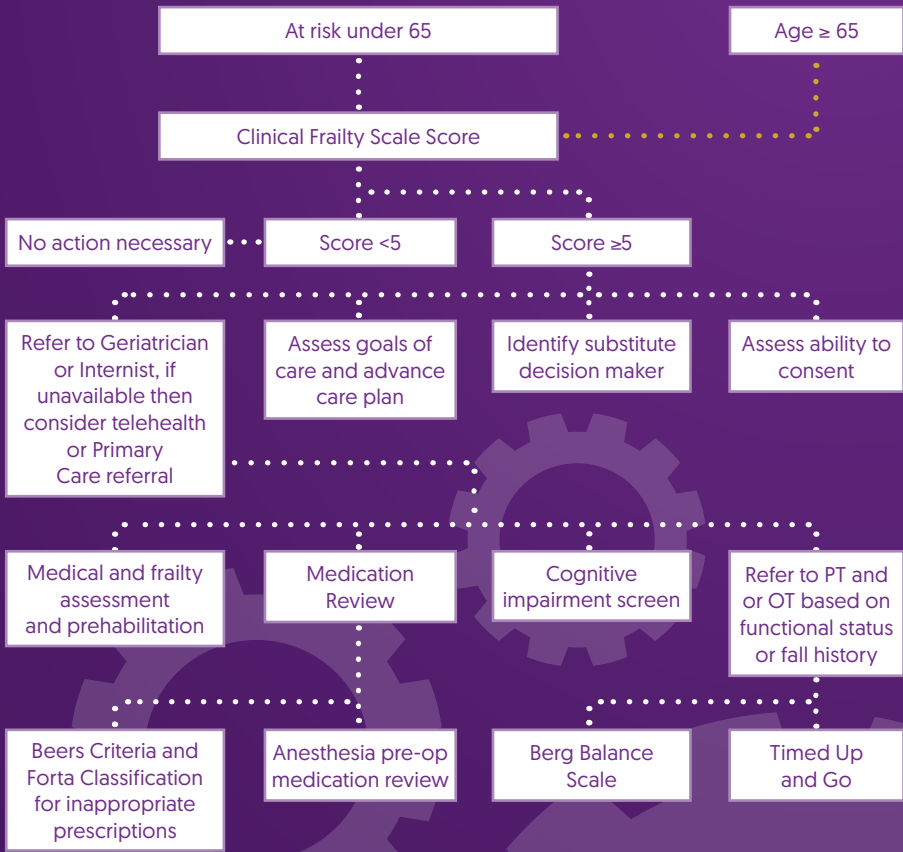
- Medication Review
  - > Beers Criteria and Forta Classification
- Referral to Geriatric or Internal medicine for medical and frailty assessment and prehabilitation
- Referral to Physiotherapy and/or Occupational Therapy based on need
- Assessment of goals of care and advance care plan
- Identification of substitute decision maker
- Assess ability to consent
- Cognitive impairment screen

*\*Ensure appropriate in-hospital and post-operative follow up and care*

#### Measurements

- Patient reported adequate supports in place prior to surgery

# FRAILITY ALGORITHM





## Clinical Frailty Scale\*



**1 Very Fit** – People who are robust, active, energetic and motivated. These people commonly exercise regularly. They are among the fittest for their age.

---



**2 Well** – People who have **no active disease symptoms** but are less fit than category 1. Often, they exercise or are very **active occasionally**, e.g. seasonally.

---



**3 Managing Well** – People whose **medical problems are well controlled**, but are **not regularly active** beyond routine walking.

---



**4 Vulnerable** – While **not dependent** on others for daily help, often **symptoms limit activities**. A common complaint is being “slowed up”, and/or being tired during the day.

---



**5 Mildly Frail** – These people often have **more evident slowing**, and need help in **high order IADLs** (finances, transportation, heavy housework, medications). Typically, mild frailty progressively impairs shopping and walking outside alone, meal preparation and housework.

---



**6 Moderately Frail** – People need help with **all outside activities** and with **keeping house**. Inside, they often have problems with stairs and need **help with bathing** and might need minimal assistance (cuing, standby) with dressing.



**7 Severely Frail – Completely dependent for personal care**, from whatever cause (physical or cognitive). Even so, they seem stable and not at high risk of dying (within ~ 6 months).



**8 Very Severely Frail** – Completely dependent, approaching the end of life. Typically, they could not recover even from a minor illness.



**9. Terminally Ill** - Approaching the end of life. This category applies to people with **a life expectancy <6 months**, who are **not otherwise evidently frail**.

### Scoring frailty in people with dementia

The degree of frailty corresponds to the degree of dementia. Common **symptoms in mild dementia** include forgetting the details of a recent event, though still remembering the event itself, repeating the same question/story and social withdrawal.

In **moderate dementia**, recent memory is very impaired, even though they seemingly can remember their past life events well. They can do personal care with prompting.

In **severe dementia**, they cannot do personal care without help.

\* 1. Canadian Study on Health & Aging, Revised 2008.

2. K. Rockwood et al. A global clinical measure of fitness and frailty in elderly people. CMAJ 2005;173:489-495.

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## Implement clinical tools to prehabilitate patients prior to surgery

### Glycemic Control

Watch Video ▶



#### Screening Tools

- Glycemic Control Screening Questions

#### Change Ideas

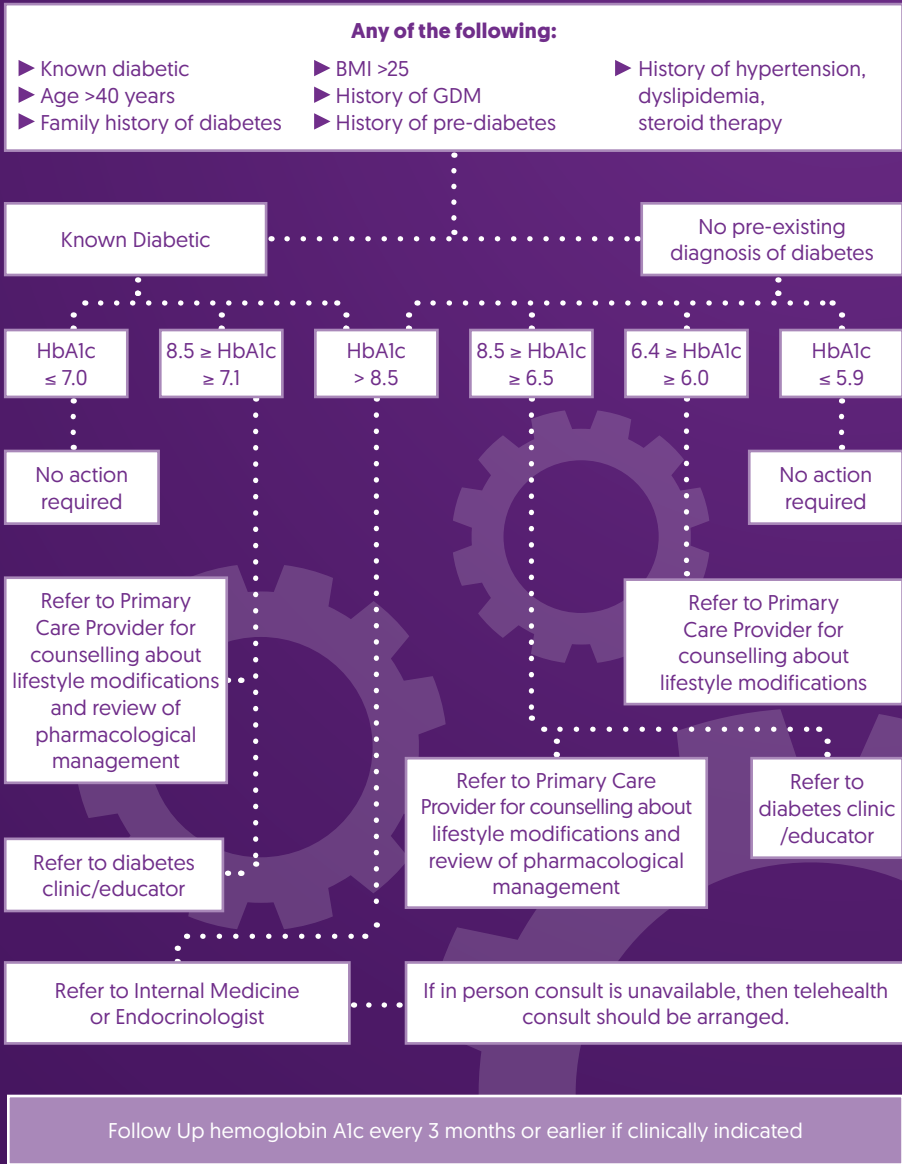
- Primary Care Provider for counselling about diagnosis, lifestyle modifications, and pharmacological management
- Internal Medicine or Endocrinologist assessment
- Diabetes clinic/educator assessment
- Medication review
- Limited resource settings can use telehealth to arrange specialty care
- Diabetes Canada - My Action Plan

*\* Ensure appropriate in-hospital and post-operative follow up and care*

#### Measurements

- HbA1c 90 days after first HbA1c
- Repeat HbA1c every 90 days or if clinically indicated

# GLYCEMIC CONTROL ALGORITHM



## GLYCEMIC CONTROL SCREENING TOOL

### Glycemic Control Screening Questions



	YES	NO
<b>Previously diagnosed with diabetes</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Age over 40</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Family history of diabetes</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>History of hypertension, dyslipidemia or steroid use</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>BMI &gt;25</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>History of gestational diabetes mellitus</b>	<input type="checkbox"/>	<input type="checkbox"/>
<b>History of pre-diabetes</b>	<input type="checkbox"/>	<input type="checkbox"/>

If **YES** to any of the above questions then a pre-operative screening hemoglobin A1c test is recommended.







## Implement clinical tools to prehabilitate patients prior to surgery

### Nutrition

Watch Video ▶



#### Screening Tools

- Canadian Nutrition Screening Tool  
[Other option: PONS - Perioperative Nutrition Screen]

#### Change Ideas

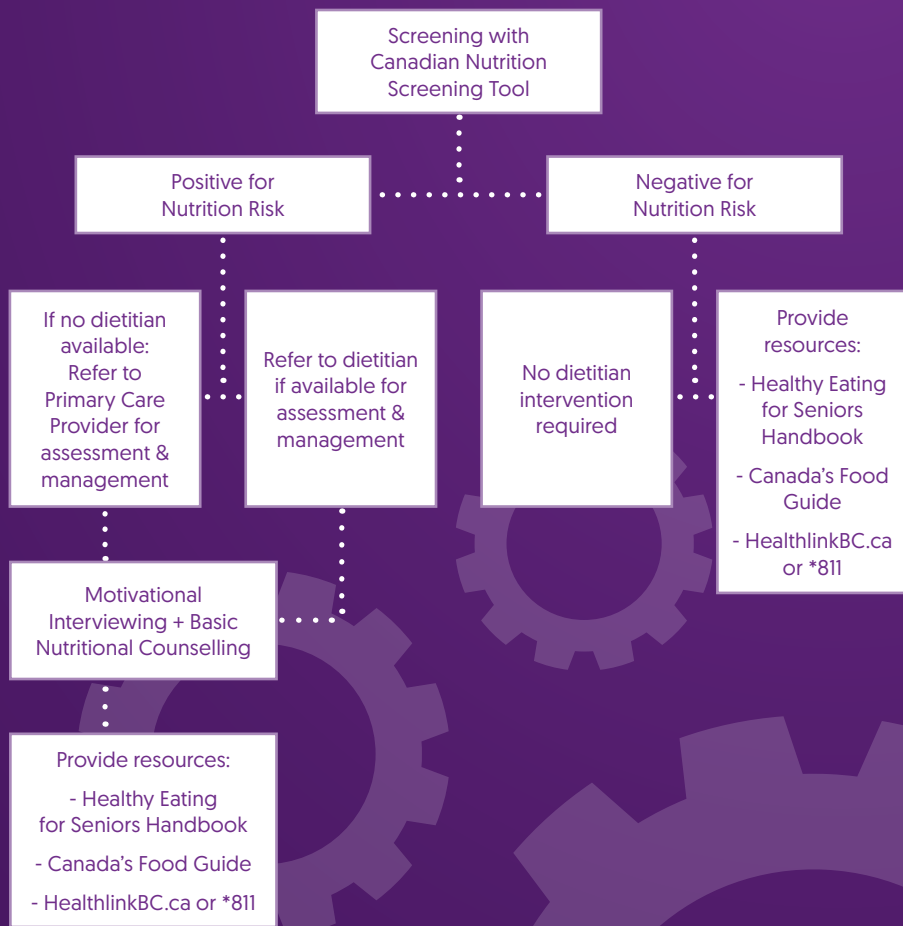
- Primary Care Provider assessment, motivational interviewing and basic nutrition counselling
- Dietitian assessment
- Healthlinkbc.ca or \*811
- Healthy Eating for Seniors Handbook
- Canada's Food Guide

*\* Ensure appropriate in-hospital and post-operative follow up and care*

#### Measurements

- Repeat CNST

# NUTRITION ALGORITHM





## CANADIAN NUTRITION SCREENING TOOL (CNST)

Name:	Age:	Weight:	Room:

### Identify patients who are at risk for malnutrition

Ask the patient the following questions*	Date:		Date:	
	Admission		Rescreening	
	Yes	No	Yes	No
Have you lost weight in the past 6 months <b>WITHOUT TRYING</b> to lose this weight? <small>If the patient reports a weight loss but gained it back, consider it as NO weight loss.</small>				
Have you been eating less than usual <b>FOR MORE THAN A WEEK?</b>				
<b>Two "YES" answers indicate nutrition risk<sup>†</sup></b>				

\* If the patient is unable to answer the questions, a knowledgeable informant can be used to obtain the information. If the patient is uncertain regarding weight loss, ask if clothing is now fitting more loosely.

### Patients at nutrition risk need an assessment to confirm malnutrition

Nutrition screening using a valid tool can generate a significant volume of requests for nutrition evaluation. Subjective Global Assessment (SGA) is a simple and efficient first-line assessment of nutritional status that can be used following a positive screening and to help prioritize cases.

If a patient is malnourished (SGA B or C), an in-depth nutrition assessment, along with treatment, is required by a registered dietitian.

**The Canadian Nutrition Screening Tool was rigorously validated and tested for reliability in Canadian hospitals. Non-expert raters completed the tool and it was compared to the SGA conducted by a dietitian or trained nutrition researcher.**

† If a patient is not at risk, rescreen within a week. Only consider weight change in the past week.

Validation and reliability testing of the Canadian Nutrition Screening Tool was funded by an unrestricted educational grant of Abbott Nutrition Canada.



Canadian Nutrition Society  
Soci t  canadienne de nutrition



Canadian Malnutrition Task Force  
le Groupe de travail canadien sur la malnutrition





# CLINICAL COMPONENTS



## Implement clinical tools to prehabilitate patients prior to surgery

### Obesity

Watch Video ▶



#### Screening Tools

- Body Mass Index (BMI)

#### Change Ideas

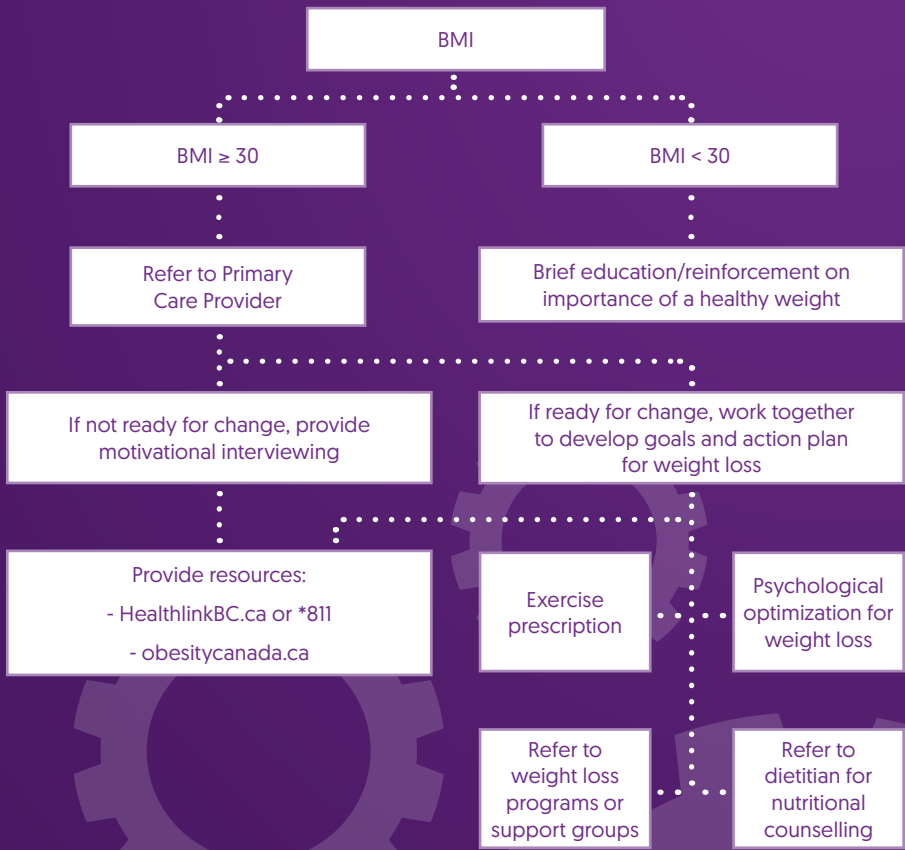
- Refer to primary care provider if BMI  $\geq 30$  or below 18.5
- Motivational Interviewing
- HealthlinkBC.ca or \*811
- Obesitycanada.ca
- Exercise prescription
- BC Centre for Disease Control
- Weight loss programs or support groups
- Psychological optimization for weight loss
- Refer to dietitian for nutritional counselling

*\*Ensure appropriate in-hospital and post-operative follow up and care*

#### Measurements

- Repeated BMI

# OBESITY ALGORITHM



## Implement clinical tools to prehabilitate patients prior to surgery

### Pain Management

Watch Video ▶



#### Screening Tools

- ⚙ Pain Screening Questions

#### Change Ideas

- ⚙ Brief Pain Inventory [See Appendix I]
- ⚙ Pre-operative education on post-operative pain expectations
- ⚙ Pain service assessment
- ⚙ Selfmanagementbc.ca
- ⚙ Self-referral online group medical visits
- ⚙ Medication review
- ⚙ Painbc.ca
- ⚙ Opioid agonist therapy clinic
- ⚙ Primary Care Provider for directed management and post-op follow up

*\*Ensure appropriate in-hospital and post-operative follow up and care*

#### Measurements

- ⚙ One or more change ideas completed

# PAIN MANAGEMENT ALGORITHM





## PAIN MANAGEMENT SCREENING TOOL

### Pain Screening Questions



**In the past 4 weeks, have you been taking more than twice a week any non-prescription medications or products to manage pain?**

*For example: Tylenol, anti-inflammatory, cannabis products*

Yes  No

If yes, please describe:

**In the past 4 weeks, have you been using any non-medical therapies specifically to manage pain?**

*For example: Physiotherapy, occupational therapy, massage*

Yes  No

If yes, please describe:

**In the past 4 weeks, have you been prescribed any medications or products to manage pain?**

*For example: Gabapentin, Tylenol #3, tramadol, anti-depressants*

Yes  No

If yes, please describe:

**In the past 4 weeks, how much did pain interfere with your normal activities at work or at home?**

- Not at all
- A little bit
- Moderately
- Quite a bit
- Extremely

**Yes** to one or more of the questions indicates a positive screen





## Implement clinical tools to prehabilitate patients prior to surgery

### Physical Activity

Watch Video ▶



#### Screening Tools

- The Physical Activity Vital Sign Calculator

#### Change Ideas

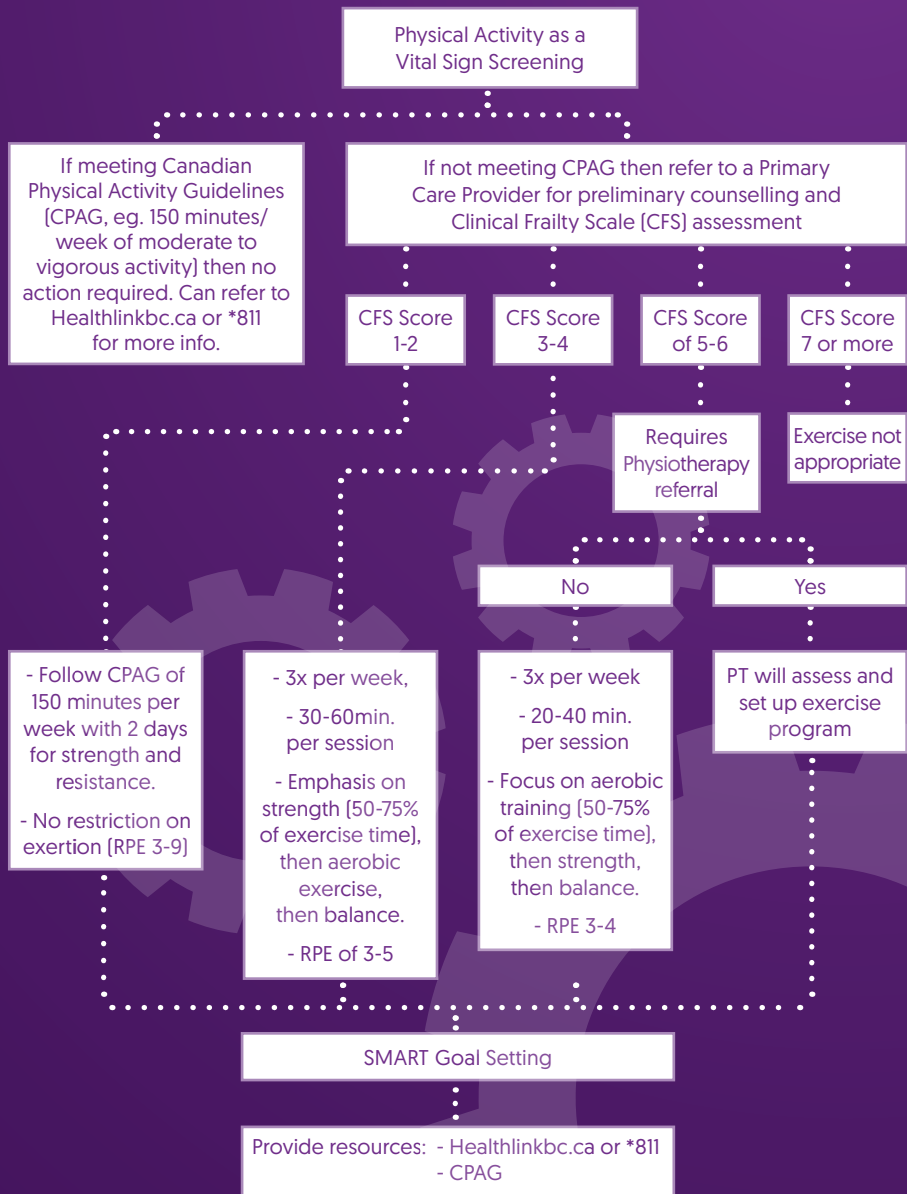
- Primary Care Provider for Clinical Frailty Scale assessment and preliminary counselling
- Referral to Physiotherapist or Kinesiologist
- Healthlinkbc.ca or \*811
- Canadian Physical Activity Guidelines
- 6 Minute Walk Test
- SMART Goal Setting

*\* Ensure appropriate in-hospital and post-operative follow up and care*

#### Measurements

- Repeat Physical Activity Vital Sign Calculator

# PHYSICAL ACTIVITY ALGORITHM



# PHYSICAL ACTIVITY SCREENING TOOL

## The Physical Activity Vital Sign Calculator



### The Physical Activity Vital Sign

1. On average, how many days per week do you engage in moderate to strenuous exercise (like a brisk walk)? \_\_\_\_\_ days
  2. On average, how many minutes do you engage in exercise at this level? \_\_\_\_\_ minutes
- Total minutes per week of physical activity (multiply #1 by #2) \_\_\_\_\_ minutes per week**

### Using the Physical Activity Vital Sign

- National guidelines recommend 150 minutes per week of moderate intensity physical activity. Moderate intensity activity is usually done where an individual can talk, but cannot “sing”. Examples include: *brisk walking, slow biking, general gardening, and ballroom dancing.*
- In place of moderate intensity activity, an individual can also complete 75 minutes of vigorous intensity physical activity. Vigorous intensity activity is done at a pace where individuals can no longer talk and are somewhat out of breath. Examples include: *swimming laps, playing singles tennis, and fast bicycling.*
- Individuals can also achieve 150 “minutes” through a combination of moderate and vigorous intensity physical activity, with 1 minute of vigorous activity being equal to 2 minutes of moderate activity.
- If activity is done throughout the day, individuals are encouraged to perform activity in “bouts” that are at least 10 minutes in length.
- If your patient is NOT achieving 150 minutes a week of physical activity, advise them to gradually increase either their frequency or duration until they are capable of safely performing 10 minutes bouts of activity and achieve national recommendations.

### The Physical Activity Vital Sign – Other Considerations

- A comprehensive assessment of physical activity should include promotion of active living throughout the day to reduce sedentary time, as well as muscle strengthening and flexibility exercises as recommended by the Physical Activity Guidelines for Americans.
- If you wish to add a question on muscle strengthening activities, we would recommend the following question:

How many days a week do you perform muscle strengthening exercises, such as bodyweight exercises or resistance training? \_\_\_\_\_ days



# CLINICAL COMPONENTS



## Implement clinical tools to prehabilitate patients prior to surgery

### Sleep Apnea

Watch Video ▶



#### Screening Tools

- STOP-Bang Questionnaire
- Home Sleep Apnea Test HSAT

#### Change Ideas

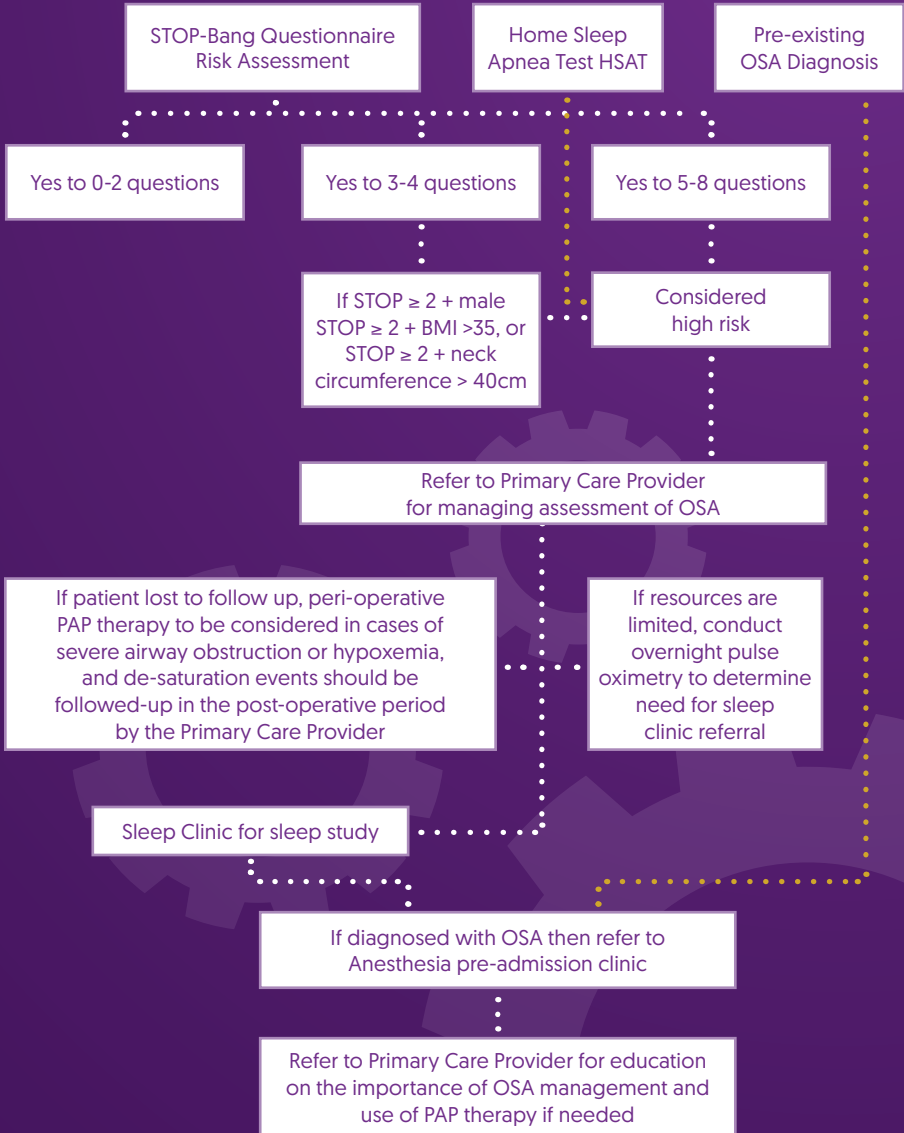
- Primary Care Provider for education on the importance of OSA management and use of the equipment
- Sleep Clinic assessment
- Specialist assessment
- If resources are limited, conduct overnight pulse oximetry to determine need for sleep clinic referral
- BC Guidelines for Sleep Apnea

*\* Ensure appropriate in-hospital and post-operative follow up and care*

#### Measurements

- One or more change ideas completed

# SLEEP APNEA ALGORITHM





# SLEEP APNEA SCREENING TOOL

## STOP-Bang Questionnaire



### STOP-Bang Questionnaire

Is it possible that you have ...  
Obstructive Sleep Apnea (OSA)?

Please answer the following questions below to determine if you might be at risk.



Yes  No

#### **S**noring ?

Do you **Snore Loudly** (loud enough to be heard through closed doors or your bed-partner elbows you for snoring at night)?

Yes  No

#### **T**ired ?

Do you often feel **Tired, Fatigued, or Sleepy** during the daytime (such as falling asleep during driving or talking to someone)?

Yes  No

#### **O**bserved ?

Has anyone **Observed** you **Stop Breathing** or **Choking/Gasping** during your sleep ?

Yes  No

#### **P**ressure ?

Do you have or are being treated for **High Blood Pressure** ?

Yes  No

#### **B**ody Mass Index more than 35 kg/m<sup>2</sup>?

##### Body Mass Index Calculator

cm / kg  inches / lb

Height:  Weight:

BMI:

Yes  No

#### **A**ge older than 50 ?

Yes  No

#### **N**eck size large ? (Measured around Adams apple)

Is your shirt collar 16 inches / 40cm or larger?

Yes  No

#### **G**ender = Male ?

##### For general population

**OSA - Low Risk** : Yes to 0 - 2 questions

**OSA - Intermediate Risk** : Yes to 3 - 4 questions

**OSA - High Risk** : Yes to 5 - 8 questions

or Yes to 2 or more of 4 STOP questions + male gender

or Yes to 2 or more of 4 STOP questions + BMI > 35kg/m<sup>2</sup>

or Yes to 2 or more of 4 STOP questions + neck circumference 16 inches / 40cm



## Implement clinical tools to prehabilitate patients prior to surgery

### Smoking Cessation

Watch Video ▶



#### Screening Tools

- Has the patient smoked tobacco in the past 6 months?

#### Change Ideas

- Quitnow.ca
- Primary Care Provider for assessing willingness for change, counselling and motivational interviewing
- Healthlinkbc.ca or \*811
- BC Smoking Cessation Program
- Stop Smoking Video †
- BC.211.ca or \*211
- Smoker's helpline

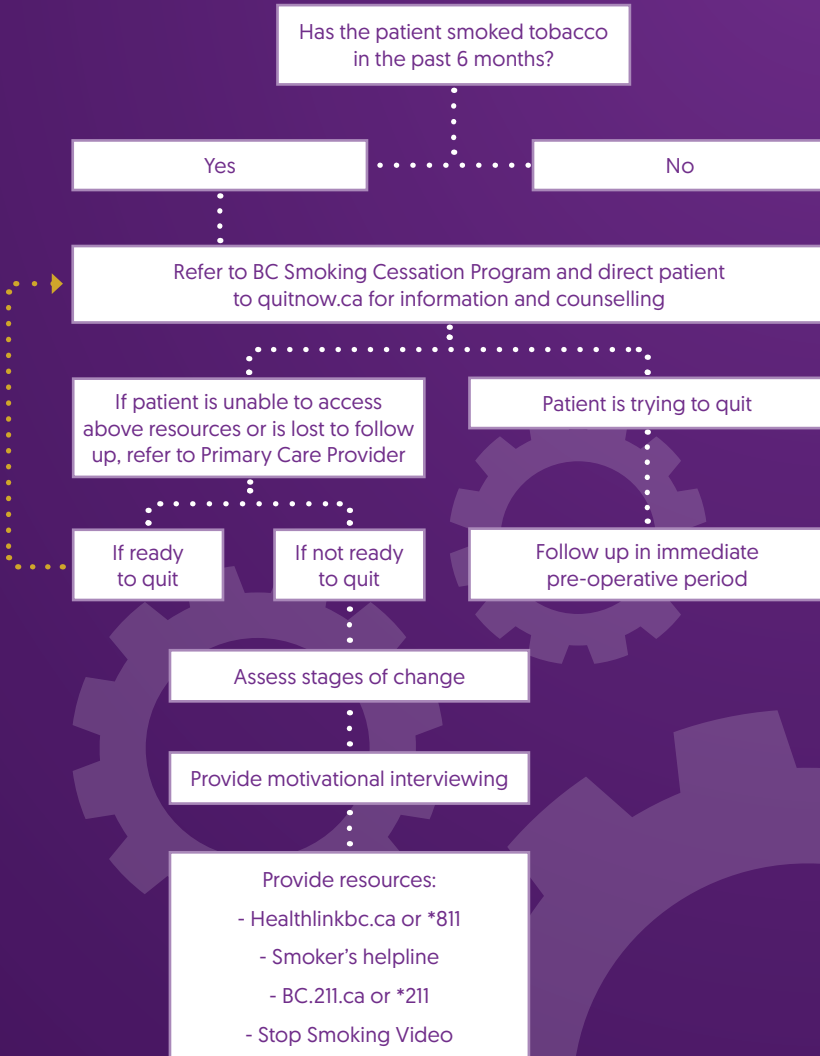
\* Ensure appropriate in-hospital and post-operative follow up and care

#### Measurements

- Date of last smoked tobacco
- Did patient decrease smoking before surgery?

† [www.youtube.com/watch?v=nylJo7VCdPE](http://www.youtube.com/watch?v=nylJo7VCdPE)

# SMOKING CESSATION ALGORITHM



# CLINICAL COMPONENTS

## Implement clinical tools to prehabilitate patients prior to surgery

### Social Supports

Watch Video ▶



#### Screening Tools

- All patients should be optimized for social support

#### Change Ideas

- Confirm friend/family/caregiver support and include them in meetings with patient
- Social worker assessment
- Homecare assessment
- Primary Care Provider assessment for preliminary support and management of allied health professional care
- BC.211.ca or \*211
- Healthlinkbc.ca or \*811
- Connect with community supports

*\* Ensure appropriate in-hospital and post-operative follow up and care*

#### Measurements

- Patient reported adequate supports in place prior to surgery





## Implement clinical tools to prehabilitate patients prior to surgery

### Substance Use

Watch Video ▶



#### Screening Tools

- CAGE-AID

#### Change Ideas

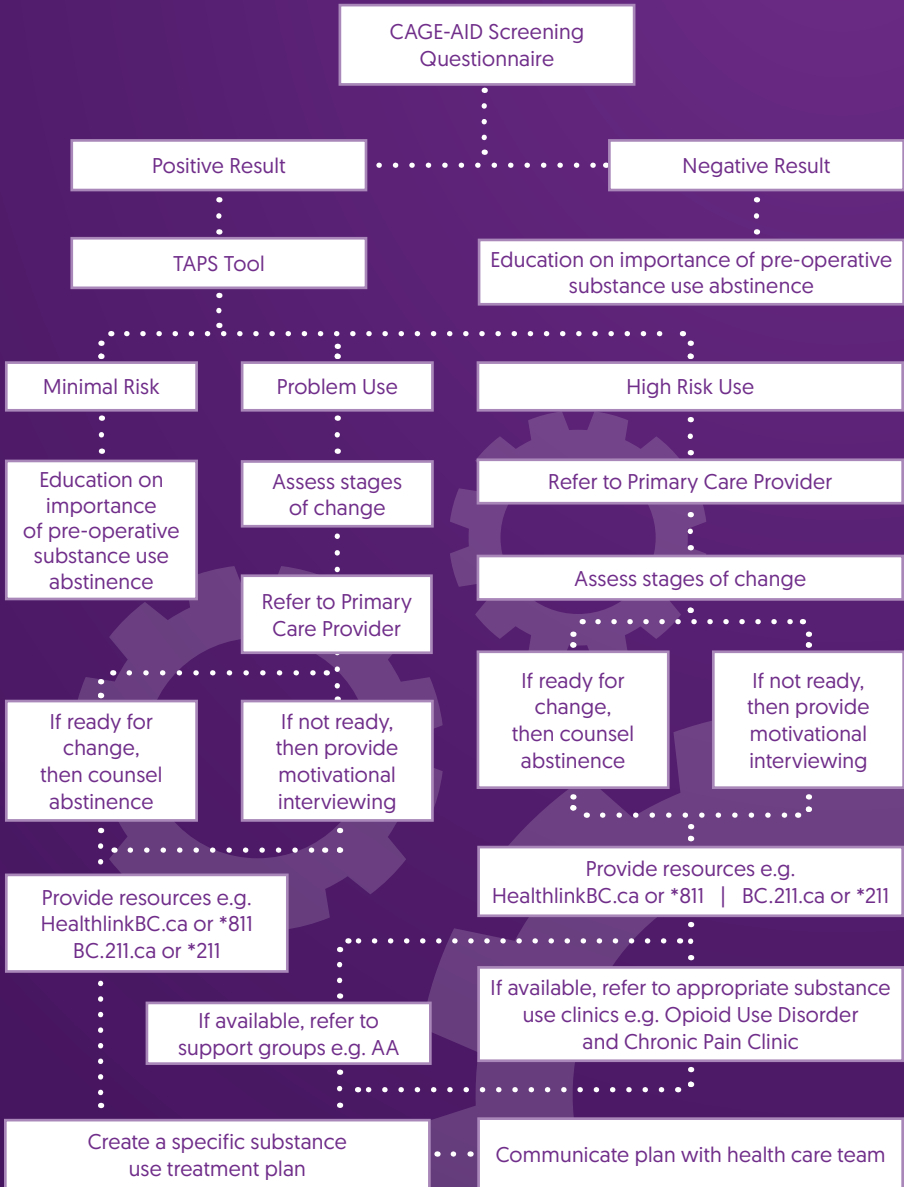
- Primary Care Provider for assessment, creating a substance use treatment plan and to coordinate plan with surgeon
- Healthlinkbc.ca or \*811
- Treatment groups
- Alcohol abuse intervention
- BC.211.ca or \*211
- Referral to pharmacist
- Counselling
- Medication supplements
- TAPS Tool (See Appendix H)

*\* Ensure appropriate in-hospital and post-operative follow up and care*

#### Measurements

- Decreased substance usage
- Date of last substance use

# SUBSTANCE USE ALGORITHM





# SUBSTANCE USE SCREENING TOOL

## CAGE-AID



### CAGE-AID Questionnaire

Share

The CAGE Adapted to Include Drugs (CAGE-AID) Questionnaire is an adaptation of the CAGE for the purpose of conjointly screening for alcohol and drug problems. The CAGE-AID focuses on lifetime use.

When thinking about drug use, include illegal drug use and the use of prescription drug use other than prescribed.

Questions	Points
<b>C</b> : Have you ever felt that you ought to <u>C</u> ut down on your drinking or drug use?	<input type="radio"/> Yes +1 <input type="radio"/> No +0
<b>A</b> : Have people <u>A</u> nnoyed you by criticizing your drinking or drug use?	<input type="radio"/> Yes +1 <input type="radio"/> No +0
<b>G</b> : Have you ever felt bad or <u>G</u> uilty about your drinking or drug use?	<input type="radio"/> Yes +1 <input type="radio"/> No +0
<b>E</b> : Have you ever had a drink or used drugs first thing in the morning to steady your nerves or to get rid of a hangover ( <u>E</u> ye opener)?	<input type="radio"/> Yes +1 <input type="radio"/> No +0

0 points

#### Interpretation:

One or more "yes" responses is regarded as a positive screening test, indication possible substance use and need for further evaluation.

*This tool was developed by Richard Brown, MD and Laura Saunders at the University of Wisconsin.*



PRIMARY DRIVER

## **Introduce a refined process to allow for prehabilitation**

SECONDARY DRIVERS

- Adapt/modify existing processes to allow for patient prehabilitation to take place

# PROCESS IMPROVEMENT



Introduce a refined process to allow for prehabilitation

Adapt/modify existing processes to allow for patient prehabilitation to take place

## Change Ideas

- Process map current and future state
- Analysis of existing documentation
- Facilitated discovery workshops
- Individual staff or small group interviews
- Direct work observation
- Business analysis design

# SPREAD AND SUSTAINABILITY

## PRIMARY DRIVER

**Address the human aspects of change, to ensure change endures and is spread widely**

## SECONDARY DRIVERS

- ◉ **S** - Support
- ◉ **P** - Positive Culture
- ◉ **R** - Resources
- ◉ **E** - Engagement
- ◉ **A** - Adoption/Ability
- ◉ **D** - Desired Results

# SPREAD AND SUSTAINABILITY

## SUPPORT

**Effective and supportive leadership is critical in change.** Leaders need to be visible, encouraging, and authentic. Leaders solicit and respond to feedback, demonstrating care and active listening.

### Themes

- ◉ Visible and Visionary Leadership
- ◉ Encouragement and Support
- ◉ Feedback and Ideas
- ◉ Communication

## POSITIVE CULTURE

**Culture reflects the attributes, beliefs, perceptions & values employees share.** Change leaders must understand the role that culture plays on staff behaviour and their ability to deliver improvements.

### Themes

- ◉ Model the Way
- ◉ Rewarding Patient Care
- ◉ Common Vision and Practices
- ◉ Learning Culture

## RESOURCES

**Teams and individuals must feel capable to transition into the new desired state.** Change leaders need to be able to provide time and access to knowledge (both intellectual and psychological) needed for staff to implement the required skills and behaviours.

### Themes

- ◉ Capacity
- ◉ Investment
- ◉ Training and Education
- ◉ Accessibility



## ENGAGEMENT

**The degree of person-centeredness in a system is reflected in superior decision making, design and care.** Large-scale engagement is the best way to guarantee spread and sustainability in change. Change leaders need to ensure everyone has a vested interest in the change, across all levels and roles, and feels that they have a voice in the change process.

### Themes

- ⚙ Valued Contribution
- ⚙ Understanding Motivation
- ⚙ Involvement
- ⚙ Ownership

## ADOPTION

**Understanding why errors occur and tackling poor design and procedures is key to improvement.** Hearing, listening and responding to the voices of staff and patients is key to ensuring the successful implementation of a change. Change leaders need to ensure that reasons for change, processes, and required skills are made clear to maximize adoption.

### Themes

- ⚙ Keep it simple
- ⚙ PDSA Cycles
- ⚙ Reason for Change
- ⚙ Contextual Implementation

## DESIRED RESULTS

**All improvement will require change, but not all change will result in improvement.** Evaluation is vital to our understanding of which methods and innovations work to improve quality. Where there is a clear benefit from a change, innovation or improvement, that modification will be adapted and spread more rapidly.

### Themes

- ⚙ Impact measurement
- ⚙ Monitoring Improvement Outcomes
- ⚙ Data Collection
- ⚙ Innovation

## APPENDIX A

# Post-Operative Patient Outcomes Definitions



Superficial Incisional SSI	Superficial incisional SSI is an infection that involves only skin or subcutaneous tissue of the surgical incision.
Deep Incisional SSI	Deep Incisional SSI is an infection which involves deep soft tissues. Deep soft tissues are typically any tissue beneath skin and immediate subcutaneous fat, for example fascial and muscle layers
Organ/Space SSI	Organ/Space SSI is an infection that involves any part of the anatomy [e.g., organs or spaces], other than the incision, which was opened or manipulated during an operation.
Wound disruption	The spontaneous reopening of a previously surgically closed wound.
Pneumonia	Pneumonia is an infection of one or both lungs caused by bacteria, viruses, fungi, or aspiration. Pneumonia can be community acquired or acquired in a health care setting.
Intraoperative OR Postoperative Unplanned Intubation	The placement of an endotracheal tube or other similar breathing tube [Laryngeal Mask Airway (LMA), nasotracheal tube, etc.] and ventilator support.
On Ventilator > 48 Hours	Total cumulative time of ventilator-assisted respirations exceeding 48 hours.
Pulmonary Embolism	Lodging of a blood clot in the pulmonary artery with subsequent obstruction of blood supply to the lung parenchyma. The blood clots usually originate from the deep leg veins or the pelvic venous system.
Progressive Renal Insufficiency/Acute Renal Failure Requiring Dialysis	Progressive Renal Insufficiency: the reduced capacity of the kidney(s) to perform its function in comparison to the preoperative state. Acute Renal Failure Requiring Dialysis: A clinical condition associated with significant decline of kidney function in comparison to the preoperative state.
Urinary Tract Infection	An infection in the urinary tract (kidneys, ureters, bladder, and urethra).
Stroke/Cerebral Vascular Accident (CVA)	An interruption or severe reduction of blood supply to the brain resulting in severe dysfunction.
Intraoperative or Postoperative Cardiac Arrest Requiring CPR	The absence of cardiac rhythm or presence of a chaotic cardiac rhythm requiring the initiation of cardiopulmonary resuscitation.
Intraoperative or Postoperative Myocardial Infarction	Blockage of blood flow to the heart causing damage or death to part of the heart muscle.
Transfusion Intra/Postop (RBC within the First 72 Hrs of Surgery Start Time)	Transfusion of red blood cells, whole blood, autologous blood, and cell-saver products.
Vein Thrombosis Requiring Therapy	New diagnosis of blood clot or thrombus within the venous system (superficial or deep) which may be coupled with inflammation and requires treatment.
Sepsis	Sepsis takes a variety of forms and spans from relatively mild physiologic abnormalities to septic shock Sepsis: systemic response to infection. Septic Shock: Sepsis is considered severe when it is associated with organ and/or circulatory dysfunction.
Still in Hospital > 30 Days	The patient remains in the acute care setting at your institution continuously for > 30 days after the principal operative procedure.
Postoperative Death > 30 Days of Procedure if in Acute Care	Death occurring > 30 days after the principal operative procedure, as a direct result of the surgery and/or associated with postoperative complications and the patient has remained in the hospital in the acute care setting at your site.
Hospital Readmission	Patients who were discharged from their acute hospital stay for their principal operative procedure, and subsequently readmitted as an inpatient to an acute care hospital setting.
Unplanned reoperation	A return to the OR that was not planned at the time of the principal operative procedure.
Average Acute LOS	Report at baseline, September 2019 to May 2021
Average Complication rate	Report at baseline, September 2019 to May 2021
Average Readmission rate	Report at baseline, September 2019 to May 2021





**REALM-SF Score Sheet**

Patient ID #: \_\_\_\_\_ Date: \_\_\_\_\_ Examiner Initials: \_\_\_\_\_

Behavior \_\_\_\_\_

Exercise \_\_\_\_\_

Menopause \_\_\_\_\_

Rectal \_\_\_\_\_

Antibiotics \_\_\_\_\_

Anemia \_\_\_\_\_

Jaundice \_\_\_\_\_

**TOTAL SCORE** \_\_\_\_\_

**Administering the REALM-SF:**

**Suggested Introduction:**

“Providers often use words that patients don’t understand. We are looking at words providers often use with their patients in order to improve communication between health care providers and patients. Here is a list of medical words.

Starting at the top of the list, please read each word aloud to me. If you don’t recognize a word, you can say “pass” and move on to the next word.”

Interviewer: Give the participant the word list. If the participant takes more than 5 seconds on a words, say “pass” and point to the next word. Hold this scoring sheet so that it is not visible to the participant.



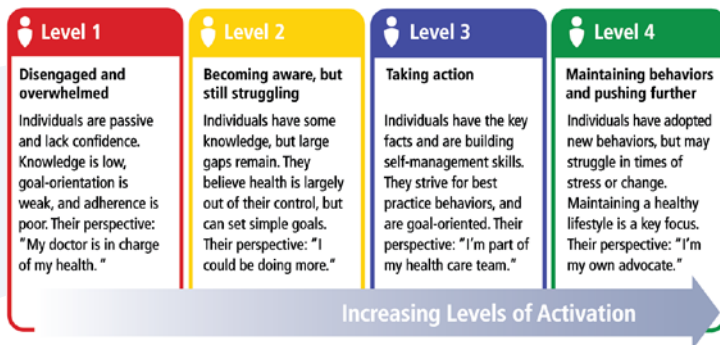
# PATIENT ACTIVATION MEASURE® (PAM®)



## Increasing Activation Starts with Measurement

The Patient Activation Measure® (PAM®) is a 10- or 13-item survey that assesses a person’s underlying knowledge, skills and confidence integral to managing his or her own health and healthcare.

PAM segments individuals into one of four activation levels along an empirically derived 100-point scale. Each level provides insight into an extensive array of health-related characteristics, including attitudes, motivators, and behaviors. Individuals in the lowest activation level do not yet understand the importance of their role in managing their own health, and have significant knowledge gaps and limited self-management skills. Individuals in the highest activation level are proactive with their health, have developed strong self-management skills, and are resilient in times of stress or change.



©2020 Insignia Health. Patient Activation Measure® (PAM®) Survey Levels. All rights reserved.

## PAM is Backed by Extensive Research

The Patient Activation Measure survey is a unidimensional, interval level, Guttman-style question scale developed by Dr. Judith Hibbard, Dr. Bill Mahoney and colleagues at the University of Oregon. PAM was created and tested using Rasch analysis and classical test theory psychometric methods. Related versions include Caregiver PAM and Parent PAM, and over 35 validated translations.

To date, over 500 peer-reviewed published studies worldwide have documented the PAM survey’s ability to measure activation and predict a broad range of health-related behaviors and outcomes. This foundation in research consistently demonstrates that individual self-management improves significantly as activation increases, and has led to endorsement of PAM as a performance measure by the [National Quality Forum](#).

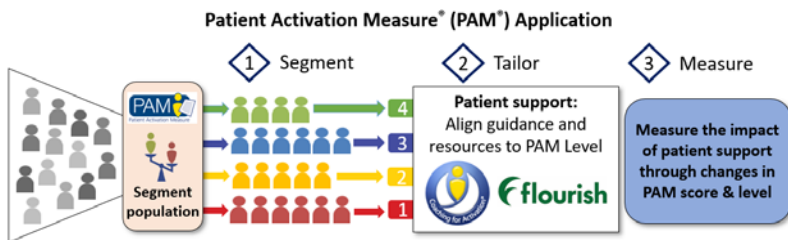
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Rev.20200505



## PAM® Applications

The Patient Activation Measure survey is reliable and valid for use with all patients, including those managing chronic conditions and engaged in disease prevention efforts. PAM is widely used today in population health management programs, disease and case management systems, wellness programs, medical home projects, care transitions, value-based programs, and much more. PAM is applied in three key manners:



- 1. Improving segmentation and risk identification.** Traditional risk models rely upon past utilization and have been shown to miss over half of the individuals in the lower two activation levels. Research consistently shows that lower activation is an indicator for disease progression, like [diabetes](#) or [depression](#), as well as increased ED visits, hospital admissions, and [ambulatory care sensitive \(ACS\)](#) utilization.
- 2. Tailoring Support to PAM Level.** Hundreds of health-related characteristics have been mapped to PAM Levels, offering a wealth of insight into a person's self-management abilities. This insight guides patient support to establish goals and action steps that are realistic and achievable for each individual. An activation-based approach to coaching and education, whether provided by phone, in clinic, online or in-home, has been proven to deliver significantly improved outcomes. Insignia Health's coaching model (Coaching for Activation®) and consumer-facing Web-based program (Flourish®) make over a decade of activation research and experience actionable for health care organizations and the people they serve.
- 3. Measuring Impact.** Even a single point change in PAM score is [meaningful](#). By periodically re-administering the PAM survey, the impact of patient support strategies and programs can be understood well in advance of traditional outcome measures.

### About Insignia Health

Insignia Health specializes in helping health systems, health plans, hospitals, care management services, and other organizations assess patient activation and develop strategies for helping individuals become more successful managers of their health and health care. Insignia Health applies its proprietary family of health activation assessments to measure each individual's self-management competencies. The Patient Activation Measure® and over 15 years of health activation research form the cornerstone of a complementary suite of solutions that help clinicians, coaches and population health providers improve health outcomes and lower costs. Insignia Health supports health activation efforts of over 250 health systems and organizations around the world.

InsigniaHealth.com



### Diary of Symptoms

You can complete this form online and then print the form for easy reference. Only text that is visible on the form is printed; scrolled text will not print. Any text you enter into these fields will be cleared when you close the form; you cannot save it.

You can help your doctor diagnose and treat your condition by being prepared to answer questions about your symptoms. Since some symptoms are difficult to describe, it is helpful to write down information about your symptoms as you experience them during your daily activities.

While waiting for your appointment, keep a diary of your symptoms. This form may help. Describe the symptom for which you are keeping this diary:

Day	1	2	3	4	5	6	7
Time of day the symptom starts							
Time of day the symptom bothers you the most							
Does the symptom come and go during the day?							
Is the symptom affected by any of the following:							
• Activity	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Rest	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Stress	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Recent changes in your eating patterns, such as skipping meals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
• Prescription or over-the-counter medicines (name of medicine and time of day it affects your symptom)							
Time:	Time:	Time:	Time:	Time:	Time:	Time:	Time:
Medicine name:							
Medicine name:							
• Alcohol or caffeinated drinks (number and time)							
Number of drinks:							
Time of day:							
• Smoking or the use of other tobacco products							
What other symptoms do you have:							
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Rate how you felt today:							
1 – Great							
2 – Okay							
3 – Not good							
4 – Bad							
Other information about your symptoms:							



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## The **SHARE** Approach: A Model for Shared Decision Making

The SHARE Approach is a five-step process for shared decision making that includes exploring and comparing the benefits, harms, and risks of each option through meaningful dialogue about what matters most to the patient.

STEP  
**1**



**S**eek your patient's participation.

STEP  
**2**



**H**elp your patient explore & compare treatment options.

STEP  
**3**



**A**ssess your patient's values and preferences.

STEP  
**4**



**R**each a decision with your patient.

STEP  
**5**



**E**valuate your patient's decision.

Shared decision making occurs when a health care provider and a patient work together to make a health care decision that is best for the patient. The optimal decision takes into account evidence-based information about available options, the provider's knowledge and experience, and the patient's values and preferences.





✓  
**Benefits  
of the  
SHARE  
Approach**



Both health care professionals and patients benefit from using shared decision making.

**Benefits to Health care Professionals:**

- Improved quality of care delivered
- Increased patient satisfaction

**Benefits to Patients:**

- Improved patient experience of care
- Improved patient adherence to treatment recommendations

Using the SHARE Approach builds a trusting and lasting relationship between health care professionals and patients.

  
**SHARE  
Approach  
Resources**

The Agency for Healthcare Research and Quality (AHRQ) provides a collection of tools and training resources to support the implementation of shared decision making in practice. Refer to the [AHRQ Shared Decision Making Toolkit Website](#) to locate resources such as:



**SHARE Approach Workshop Curriculum:**

Collection of training guides, slides, videos, and other resources to support the training of health care professionals on shared decision making and SHARE Approach implementation



**SHARE Approach Tools:**

Collection of reference guides, posters, and other resources designed to support AHRQ's SHARE Approach implementation



**SHARE Approach Webinars:**

Accredited webinars that review topics related to the implementation of patient-centered outcomes research in shared decision making



**SHARE Approach Success Stories:**

AHRQ's SHARE Approach tools and resources are used by organizations nationwide to implement shared decision making in health care. These case studies highlight stories of successes and best practices by describing the use and impact of the AHRQ's SHARE Approach strategies and tools by health systems, clinicians, academicians, and other professionals.

These resources provide health care professionals with the training and tools they need to implement the SHARE Approach in their practice.

Go to: [www.ahrq.gov/shareddecisionmaking](http://www.ahrq.gov/shareddecisionmaking)



AHRQ Pub. No. 14-0034-1-EF  
April 2016

[www.ahrq.gov](http://www.ahrq.gov)







## My Personal Action Plan

No matter what your health goal is, creating a specific plan can help you succeed.

Follow the steps to put you on a path toward meeting your goal.

You can fill out this form online, but the information can't be saved. Or you can simply print it and then fill it out by hand.

Step 1

### Know your own reason.

Why is this change important to you? Make sure it's something that you really want to do.

Step 2

### Set a specific long-term goal.

What is a long-term goal that you can reach in about 6 to 12 months?

Step 3

### Set your short-term goals.

How can you create short-term goals that you take week by week to reach your long-term goal? \_\_\_\_\_

Step 4

### Prepare for slip-ups or setbacks.

What might get in the way of reaching this goal? You may already know that things like time, money, or emotions could get in the way. How might you get around these things? \_\_\_\_\_

Step 5

### Plan for support and rewards.

Who can help you meet your goals? Maybe friends, family, or a support group? And how will you reward yourself? A movie, a special meal, an hour to yourself can be a treat. \_\_\_\_\_



### See your success.

How will your life be different after you make this change?



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## Every time you talk with a health care provider **ASK THESE 3 QUESTIONS**

1

**What is  
my main  
problem?**

### When to ask questions

You can ask questions when:

- You see a doctor, nurse, pharmacist, or other health care provider.
- You prepare for a medical test or procedure.
- You get your medication.

2

**What do  
I need  
to do?**

### What if I ask and still don't understand?

- Let your health care provider know if you still don't understand what you need.
- You might say, "This is new to me. Will you please explain that to me one more time?"
- Don't feel rushed or embarrassed if you don't understand something. Ask your health care provider again.

3

**Why is it  
important  
for me to  
do this?**

### Who needs to ask 3?

Everyone wants help with health information. You are not alone if you find information about your health or care confusing at times. Asking questions helps you understand how to stay well or to get better.



**Ask**  
Good Questions  
for Your Good Health **Me3**<sup>®</sup>

To learn more, visit [ihi.org/AskMe3](http://ihi.org/AskMe3)

Ask Me 3 is a registered trademark licensed to the Institute for Healthcare Improvement. IHI makes Ask Me 3 materials available for distribution. Use of Ask Me 3 materials does not mean that the distributing organization is affiliated with or endorsed by IHI.

## Write your health care provider's answers to the 3 questions here:

### 1. What is my main problem?

---

---

### 2. What do I need to do?

---

---

### 3. Why is it important for me to do this?

---

---

#### Asking these questions can help you:

- Take care of your health
- Prepare for medical tests
- Take your medications the right way

You don't need to feel rushed or embarrassed if you don't understand something. You can ask your health care provider again.

When you Ask 3, you are prepared. You know what to do for your health.



## Your providers want to answer 3

Are you nervous to ask your provider questions? Don't be. You may be surprised to learn that your medical team wants you to let them know that you need help or more information.

Like all of us, health care providers have busy schedules. Yet they want you to know:

- All you can about your health or condition.
- Why their instructions are important for your health.
- Steps to take to keep you healthy and any conditions under control.

**Bring your medications with you** the next time you visit a health care provider. Or, write the names of the medications you take on the lines below.

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Like many people, you may see more than one health care provider. It is important that they all know about all of the medications you are taking so that you can stay healthy.

**Ask Me 3<sup>®</sup>** is an educational program provided by the Institute for Healthcare Improvement / National Patient Safety Foundation to encourage open communication between patients and health care providers.

**Ask**  
**Good Questions** **Me<sup>3</sup>**  
for Your Good Health



# TAPS

## Tobacco, Alcohol, Prescription medication, and other Substance use Tool

The Tobacco, Alcohol, Prescription medication, and other Substance use (TAPS) Tool consists of a combined screening component (TAPS-1) followed by a brief assessment (TAPS-2) for those who screen positive.

This tool:

- Combines screening and brief assessment for commonly used substances, eliminating the need for multiple screening and lengthy assessment tools
- Provides a two stage brief assessment adapted from the NIDA quick screen and brief assessment (adapted ASSIST-lite)
- May be either self-administered directly by the patient or as an interview by a health professional
- Uses an electronic format (available here as an online tool)
- Uses a screening component to ask about frequency of substance use in the past 12 months
- Facilitates a brief assessment of past 3 months problem use to the patient

More Information About This Tool




Frequently Asked Questions About Screening



**Intended use:** This screening tool is meant to be used under a medical provider's supervision and is not intended to guide self-assessment or take the place of a healthcare provider's clinical judgment.

**This tool may be administered by either the patient or the clinician.**

**Please indicate the mode of administration:**

 I am the patient

 I am the clinician

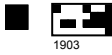


National Institutes of Health – Turning Discovery into Health



# APPENDIX I

## Brief Pain Inventory



1903

Date:  /  /   
 (month) (day) (year)

Subject's initials :   
 Study Subject #:

Study Name: \_\_\_\_\_

Protocol #: \_\_\_\_\_

PI: \_\_\_\_\_

Revision: 07/01/05

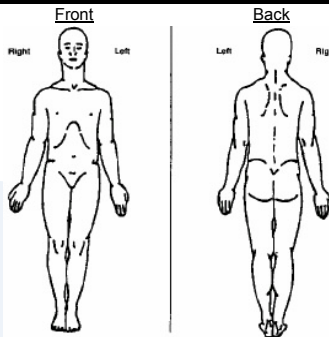
PLEASE USE  
 BLACK INK PEN

### Brief Pain Inventory (Short Form)

1. Throughout our lives, most of us have had pain from time to time (such as minor headaches, sprains, and toothaches). Have you had pain other than these everyday kinds of pain today?

Yes  No

2. On the diagram, shade in the areas where you feel pain. Put an X on the area that hurts the most.



3. Please rate your pain by marking the box beside the number that best describes your pain at its **worst** in the last 24 hours.

0  1  2  3  4  5  6  7  8  9  10  
 No Pain Pain As Bad As You Can Imagine

4. Please rate your pain by marking the box beside the number that best describes your pain at its **least** in the last 24 hours.

0  1  2  3  4  5  6  7  8  9  10  
 No Pain Pain As Bad As You Can Imagine

5. Please rate your pain by marking the box beside the number that best describes your pain on the **average**.

0  1  2  3  4  5  6  7  8  9  10  
 No Pain Pain As Bad As You Can Imagine

6. Please rate your pain by marking the box beside the number that tells how much pain you have **right now**.

0  1  2  3  4  5  6  7  8  9  10  
 No Pain Pain As Bad As You Can Imagine



1903

Date: [ ] [ ] / [ ] [ ] / [ ] [ ] [ ]  
(month) (day) (year)

Subject's Initials :

Study Subject #: [ ] [ ] [ ] [ ] [ ] [ ]

Study Name: \_\_\_\_\_

Protocol #: \_\_\_\_\_

PI: \_\_\_\_\_

Revision: 07/01/05

PLEASE USE  
BLACK INK PEN

**7. What treatments or medications are you receiving for your pain?**

[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]

**8. In the last 24 hours, how much relief have pain treatments or medications provided? Please mark the box below the percentage that most shows how much relief you have received.**

0%	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
No Relief										Complete Relief

**9. Mark the box beside the number that describes how, during the past 24 hours, pain has interfered with your:**

**A. General Activity**

0 Does Not Interfere     1     2     3     4     5     6     7     8     9     10 Completely Interferes

**B. Mood**

0 Does Not Interfere     1     2     3     4     5     6     7     8     9     10 Completely Interferes

**C. Walking ability**

0 Does Not Interfere     1     2     3     4     5     6     7     8     9     10 Completely Interferes

**D. Normal Work (includes both work outside the home and housework)**

0 Does Not Interfere     1     2     3     4     5     6     7     8     9     10 Completely Interferes

**E. Relations with other people**

0 Does Not Interfere     1     2     3     4     5     6     7     8     9     10 Completely Interferes

**F. Sleep**

0 Does Not Interfere     1     2     3     4     5     6     7     8     9     10 Completely Interferes

**G. Enjoyment of life**

0 Does Not Interfere     1     2     3     4     5     6     7     8     9     10 Completely Interferes

# REFERENCE & RESOURCE LIST



## Patient Activation

Greene J, Hibbard JH. Why does patient activation matter? An examination of the relationships between patient activation and health-related outcomes. *Journal of General Internal Medicine*. 2012;27(5):520-526. doi:10.1007/S11606-011-1931-2

Hibbard JH, Greene J. What The Evidence Shows About Patient Activation: Better Health Outcomes And Care Experiences; Fewer Data On Costs. *Health Affairs*. 2017;32(2):207-214. doi:10.1377/HLTHAFF.2012.1061

Newland P, Lorenz R, Oliver BJ. Patient activation in adults with chronic conditions: A systematic review. *Journal of Health Psychology*. 2020;26(1):103-114. doi:10.1177/1359105320947790

## Health Literacy

Rapid Estimate of Adult Literacy in Medicine—Short Form (REALM-SF). Accessed July 19, 2021. [www.ahrq.gov/health-literacy/research/tools/index.html#rapid](http://www.ahrq.gov/health-literacy/research/tools/index.html#rapid)

Arozullah AM, Yarnold PR, Bennett CL, et al. Development and validation of a short-form, Rapid Estimate of Adult Literacy in Medicine. *Medical Care*. 2007;45(11):1026-1033. doi:10.1097/MLR.0B013E3180616C1B

## Patient Activation Measure

Patient Activation Measure [PAM]. Insignia Health. Accessed July 19, 2021. <https://s3.amazonaws.com/insigniahealth.com-assets/PAM-Fact-Sheet.20200505.pdf?mtime=20200505094829&focal=none>

Hibbard JH, Stockard J, Mahoney ER, Tusler M. Development of the patient activation measure (PAM): Conceptualizing and measuring activation in patients and consumers. *Health Services Research*. 2004;39(4 1):1005-1026.doi:10.1111/J.1475-6773.2004.00269.X

## Diary of Symptoms

Diary of Symptoms. Accessed July 15, 2021. [www.healthlinkbc.ca/sites/default/libraries/healthwise/media/pdf/hw/form\\_tm6566.pdf](http://www.healthlinkbc.ca/sites/default/libraries/healthwise/media/pdf/hw/form_tm6566.pdf)

## Shared-Decision Making

The SHARE Approach | Agency for Healthcare Research and Quality. Accessed July 7, 2021. [www.ahrq.gov/health-literacy/professional-training/shared-decision/index.html](http://www.ahrq.gov/health-literacy/professional-training/shared-decision/index.html)



## My Personal Action Plan

My Personal Action Plan. Accessed July 15, 2021.

[www.healthlinkbc.ca/sites/default/libraries/healthwise/media/pdf/hw/form\\_zx3175.pdf](http://www.healthlinkbc.ca/sites/default/libraries/healthwise/media/pdf/hw/form_zx3175.pdf)

## Ask Me 3

Ask Me 3: Good Questions for Your Good Health |

IHI - Institute for Healthcare Improvement. Accessed July 19, 2021.

[www.ihl.org/resources/Pages/Tools/Ask-Me-3-Good-Questions-for-Your-Good-Health.aspx](http://www.ihl.org/resources/Pages/Tools/Ask-Me-3-Good-Questions-for-Your-Good-Health.aspx)

## Nutrition

Laporte M, Keller HH, Payette H, et al. Validity and reliability of the new Canadian Nutrition Screening Tool in the 'real-world' hospital setting. *Eur J Clin Nutr*. 2015;69(5):558-564. doi:10.1038/ejcn.2014.270

Wischmeyer PE, Carli F, Evans DC, et al. American Society for Enhanced recovery and perioperative quality initiative joint consensus statement on nutrition screening and therapy within a surgical enhanced recovery pathway. *Anesthesia and Analgesia*. 2018;126(6):1883-1895. doi:10.1213/ANE.0000000000002743

Carli F, Gillis C. Surgical patients and the risk of malnutrition: preoperative screening requires assessment and optimization. *Canadian Journal of Anesthesia/Journal canadien d'anesthésie* 2021 68:5. 2021;68(5):606-610. doi:10.1007/S12630-021-01932-4

Healthy Eating for Seniors. Accessed July 15, 2021.

[www2.gov.bc.ca/assets/gov/people/seniors/health-safety/pdf/healthy-eating-seniorsbook.pdf](http://www2.gov.bc.ca/assets/gov/people/seniors/health-safety/pdf/healthy-eating-seniorsbook.pdf)

Canada's Food Guide. Accessed July 15, 2021. [food-guide.canada.ca/en/](http://food-guide.canada.ca/en/)

## Substance Use

CAGE-AID Questionnaire. Accessed July 8, 2021.

[www.hiv.uw.edu/page/substance-use/cage-aid](http://www.hiv.uw.edu/page/substance-use/cage-aid)

Brown R, Rounds L. Conjoint screening questionnaires for alcohol and other drug abuse: criterion validity in a primary care practice. *Wisconsin medical journal*. 1995;94(3):135-140.

Tobacco, Alcohol, Prescription medication, and other Substance use (TAPS) Tool. Accessed July 8, 2021. [www.drugabuse.gov/taps/#/](http://www.drugabuse.gov/taps/#/)

McNeely J, Wu LT, Subramaniam G, et al. Performance of the tobacco, alcohol, prescription medication, and other substance use [TAPS] tool for substance use screening in primary care patients. *Annals of Internal Medicine*. 2016;165[10]:690-699. doi:10.7326/M16-0317

Baldini G. Perioperative Smoking and Alcohol Cessation. *Enhanced Recovery After Surgery*. Published online 2020:65-77. doi:10.1007/978-3-030-33443-7\_8

## Obesity

Wharton S, Lau DCW, Vallis M, et al. Obesity in adults: A clinical practice guideline. *CMAJ*. 2020;192[31]:E875-E891. doi:10.1503/CMAJ.191707

Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults--The Evidence Report. National Institutes of Health [published correction appears in *Obes Res* 1998 Nov;6[6]:464]. *Obes Res*. 1998;6 Suppl 2:51S-209S.

## Sleep Apnea

The Official STOP-Bang Questionnaire Website. Accessed July 8, 2021. [www.stopbang.ca/osa/results.php](http://www.stopbang.ca/osa/results.php)

Chung F, Yegneswaran B, Liao P, et al. STOP Questionnaire: A Tool to Screen Patients for Obstructive Sleep Apnea. *Anesthesiology*. 2008;108[5]:812-821. doi:10.1097/ALN.0B013E31816D83E4

Chung F, Memtsoudis SG, Ramachandran SK, et al. Society of Anesthesia and Sleep Medicine Guidelines on Preoperative Screening and Assessment of Adult Patients with Obstructive Sleep Apnea. *Anesthesia and Analgesia*. 2016;123[2]:452-473. doi:10.1213/ANE.0000000000001416

Cozowicz C, Memtsoudis SG. Perioperative Management of the Patient with Obstructive Sleep Apnea: A Narrative Review. *Anesthesia and Analgesia*. Published online 2021:1231-1243. doi:10.1213/ANE.0000000000005444

## Cardiac

Revised Cardiac Risk Index for Pre-Operative Risk. Accessed July 15, 2021. [www.mdcalc.com/revised-cardiac-risk-index-pre-operative-risk](http://www.mdcalc.com/revised-cardiac-risk-index-pre-operative-risk)

Lee TH, Marcantonio ER, Mangione CM, et al. Derivation and Prospective Validation of a Simple Index for Prediction of Cardiac Risk of Major Noncardiac Surgery. *Circulation*. 1999;100[10]:1043-1049. doi:10.1161/01.CIR.100.10.1043

Duceppe E, Parlow J, Macdonald P, et al. Society Guidelines Canadian Cardiovascular Society Guidelines on Perioperative Cardiac Risk Assessment and Management for Patients Who Undergo Noncardiac Surgery. *Canadian Journal of Cardiology*. 2017;33:17-32. doi:10.1016/j.cjca.2016.09.008

## Glycemic Control

Levy N, Dhatariya K. Pre-operative optimisation of the surgical patient with diagnosed and undiagnosed diabetes: a practical review. *Anaesthesia*. 2019;74 Suppl 1:58-66. doi:10.1111/ANA.14510

Halperin I, Malcolm J, Moore S, et al. Suggested Canadian Standards for Perioperative/Periprocedure Glycemic Management in Patients With Type 1 and Type 2 Diabetes. *Canadian Journal of Diabetes*. 2021;0[0]. doi:10.1016/J.CJD.2021.04.009

Managing My Diabetes - My Action Plan. Accessed July 18, 2021.  
[www.diabetes.ca/DiabetesCanadaWebsite/media/Managing-My-Diabetes/Tools%20and%20Resources/managing-my-diabetes-my-action-plan.pdf?ext=.pdf](http://www.diabetes.ca/DiabetesCanadaWebsite/media/Managing-My-Diabetes/Tools%20and%20Resources/managing-my-diabetes-my-action-plan.pdf?ext=.pdf)

Diabetes Canada | Clinical Practice Guidelines - Full Guidelines. Accessed July 19, 2021.  
[guidelines.diabetes.ca/cpg](http://guidelines.diabetes.ca/cpg)

## Physical Activity

The Physical Activity Vital Sign. Accessed July 18, 2021.  
[www.exerciseismedicine.org/assets/page\\_documents/The%20Physical%20Activity%20Vital%20Sign%20without%20Strength\\_2015\\_07\\_09\\_PDF.pdf](http://www.exerciseismedicine.org/assets/page_documents/The%20Physical%20Activity%20Vital%20Sign%20without%20Strength_2015_07_09_PDF.pdf)

Canadian Physical Activity Guidelines 18-64 years. Accessed July 18, 2021.  
[csepguidelines.ca/wp-content/uploads/2018/03/CSEP\\_PAGuidelines\\_adults\\_en.pdf](http://csepguidelines.ca/wp-content/uploads/2018/03/CSEP_PAGuidelines_adults_en.pdf)

Canadian Physical Activity Guidelines 65 Years & Older. Accessed July 18, 2021.  
[csepguidelines.ca/wp-content/uploads/2018/03/CSEP\\_PAGuidelines\\_older-adults\\_en.pdf](http://csepguidelines.ca/wp-content/uploads/2018/03/CSEP_PAGuidelines_older-adults_en.pdf)

SMART Goal Setting | HealthLink BC. Accessed July 18, 2021.  
[www.healthlinkbc.ca/physical-activity/smart-goal-setting](http://www.healthlinkbc.ca/physical-activity/smart-goal-setting)

Minnella EM, Gillis C, Edgar L, Carli F. Prehabilitation. *Enhanced Recovery After Surgery*. Published online 2020:89-99. doi:10.1007/978-3-030-33443-7\_10

## Pain Management

Brief Pain Inventory (Short Form). Published 1991. Accessed July 19, 2021.  
[www.npcrc.org/files/news/briefpain\\_short.pdf](http://www.npcrc.org/files/news/briefpain_short.pdf)

Cleeland C, Ryan K. Pain assessment: global use of the Brief Pain Inventory. *Ann Acad Med Singap*. 1994;23(2):129-138. Accessed July 19, 2021.

Levett DZH, Grimmer C. Psychological factors, prehabilitation and surgical outcomes: evidence and future directions. *Anaesthesia*. 2019;74:36-42. doi:10.1111/ANA.14507

## Social Supports

Krampe H, Barth-Zoubairi A, Schnell T, Salz AL, Kerper LF, Spies CD. Social Relationship Factors, Preoperative Depression, and Hospital Length of Stay in Surgical Patients. *International Journal of Behavioral Medicine*. 2018;25(6):658-668. doi:10.1007/s12529-018-9738-8

Kulik JA, Mahler HI. Social support and recovery from surgery. *Health psychology: official journal of the Division of Health Psychology, American Psychological Association*. 1989;8(2):221-238. doi:10.1037/0278-6133.8.2.221

## Anxiety

Levett DZH, Grimmett C. Psychological factors, prehabilitation and surgical outcomes: evidence and future directions. *Anaesthesia*. 2019;74:36-42. doi:10.1111/ANA.14507

## Smoking Cessation

World Health Organization. Tobacco & Postsurgical outcomes. Published January 20, 2020. [www.who.int/publications/i/item/9789240000360](http://www.who.int/publications/i/item/9789240000360)

## Anemia

Goodnough LT, Maniatis A, Earnshaw P, et al. Detection, evaluation, and management of preoperative anaemia in the elective orthopaedic surgical patient: NATA guidelines. *BJA: British Journal of Anaesthesia*. 2011;106(1):13-22. doi:10.1093/BJA/AEQ361

Lin Y. Preoperative anemia-screening clinics. *Hematology American Society of Hematology Education Program*. 2019;2019(1):570-576. doi:10.1182/HEMATOLOGY.2019000061

## Frailty

Clinical Frailty Scale. Accessed July 19, 2021. [www.managingmds.com/content/Clinical\\_Frailty\\_Scale.pdf](http://www.managingmds.com/content/Clinical_Frailty_Scale.pdf)

Rockwood K, Song X, MacKnight C, et al. A global clinical measure of fitness and frailty in elderly people. *CMAJ*. 2005;173(5):489-495. doi:10.1503/CMAJ.050051

Alvarez-Nebreda ML, Bentov N, Urman RD, et al. Recommendations for Preoperative Management of Frailty from the Society for Perioperative Assessment and Quality Improvement [SPAQI]. *Journal of Clinical Anesthesia*. 2018;47:33-42. doi:10.1016/J.JCLINANE.2018.02.011

*BC Guidelines: Frailty in Older Adults – Early Identification and Management*; 2017. [www2.gov.bc.ca/assets/gov/health/practitioner-pro/bc-guidelines/frailty-full\\_guideline.pdf](http://www2.gov.bc.ca/assets/gov/health/practitioner-pro/bc-guidelines/frailty-full_guideline.pdf)





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