Background & instructions

A Health Technology Assessment (HTA) provides evidence-informed advice about which tests, devices, procedures, programs, or systems should be publicly provided in the province of British Colombia (BC). The BC Health Technology Assessment Committee (HTAC) HTA process[1] was established in 2011 by health authority CEOs and the Ministry of Health to make decisions about technologies that contribute to improved patient outcomes, provide value for money, and should be publicly provided. Examples of reviewed topics can be seen at www.health.gov.bc.ca/hta.

While other processes exist for assessing pharmaceuticals, information management systems, and cancer-specific technologies, for example, if there is any doubt please complete this form and we will direct your nomination to the appropriate body.

HTA topics fall into two different categories:

1. Assessments for new or expanded public coverage (new); and
2. Assessments on the optimal use of technologies already publicly covered (pre-existing).

For information regarding HTAC's prioritization of identified topics, please see HTAC's prioritization matrix found on HTAC's webpage.[2]

For a topic to be considered please fill out all sections in Part A. While optional, it is encouraged to fill out any known information in Part B. Once complete, **please submit the nomination form to the Health Technology Assessment Office at HTA.Office@gov.bc.ca.** Nominations must be submitted by the end of November each year for consideration in the following fiscal year.

[1] For more information, please visit www.health.gov.bc.ca/hta

[2] The prioritization matrix can be found at www.health.gov.bc.ca/hta under "HTA Process" Step 1. Or follow this direct link: https://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/heath-care-partners/health-authorities/bc-health-technology-assessments/htac-prioritization-and-mcda-matrices.pdf

HTA Nomination Form Part A (Required)

NAME(S), TITLE(S) AND CONTACT INFORMATION OF THOSE NOMINATING THIS TECHNOLOGY
Anyone can nominate a topic, including individuals without an organization or title

TITLE	ORGANIZATION	NAME	EMAIL ADDRESS	PHONE
Director, Physicial Quality	Regional Health Authority X	Max Mustermann	max.mustermann@healthauthorityx.ca	555-555-5555
Executive Director, Surgical Services	Regional Health Authority Y	Jane Doe	jane.doe@healthauthorityy.ca	555-555-5555

NAME OF THE NOMINATED TECHNOLOGY

Spinal cord stimulation for persistent chronic pain.

INDICATION THE TECHNOLOGY ADDRESSES (IF THERE ARE MULTIPLE PLEASE INDICATE THE PRIMARY INDICATION OF INTEREST)

Neuromodulation in management of refractory chronic cancer and non-cancer neuropathic pain.

DESCRIPTION OF THE PATIENT POPULATION ADDRESSED BY THE TECHNOLOGY

Patients with persistent chronic pain where all other conventional pain management has failed.

DESCRIPTION OF HOW THIS TECHNOLOGY ADDRESSES THE PRIMARY INDICATION

Neuromodulation involves targeted delivery of a chemical, biological or electrical stimulus in order to modulate nervous system activity.

Specifically, electrical neurostimulation is achieved through implantation of an electrode at a targeted site of intervention. This allows for more direct stimulation than that provided through conventional therapy.

Patients with persistent chronic pain may benefit from the use of a spinal cord stimulator or other neuromodulation technology, reducing their need for opioids and/or other management. For eligible patients suffering from persistent chronic pain, neuromodulation can make a "night and day" difference in terms of quality of life.

THE PRIMARY POLICY PROBLEM / DESIRED OUTCOME OF A HEALTH TECHNOLOGY ASSESSMENT

Managing chronic pain in adults is of increasing interest in BC and elsewhere, in part due to the issues around use and abuse of opioids and exploration of alternative treatments.

INDICATE IF THIS A **NEW** (NOT/LIMITED PUBLICALLY FUNDED IN BC) TECHNOLOGY OR IS IT **PRE-EXISTING** (CURRENTLY IN USE IN BC'S HEALTH SYSTEM)

■ **NEW** (PLEASE FILL OUT S**ECTION I** BELOW) ☐ **PRE-EXISTING** (PLEASE FILL OUT S**ECTION II** BELOW)

I. IF THIS IS A **NEW TECHNOLOGY**	**II.** IF THIS IS A **PRE-EXISTING TECHNOLOGY**
CURRENT STANDARD OF CARE Opiods and other end of line pain management therapies.	LIST OF PRIMARY CONCERNS WITH THIS TECHNOLOGY
LIST OF PRIMARY BENEFITS OF THIS TECHNOLOGY Improved pain relief and decreased adverse events. Improved quality of life. Improved patient satisfaction/experience.	DESCRIPTION OF OPTIMAL USE OF THIS TECHNOLOGY

HTA Nomination Form Part B (Supplemental)

All fields are optional. When possible, please include sources for your responses.

NAME(S), TITLE(S) AND CONTACT INFORMATION OF CLINICAL EXPERT(S) WILLING TO WORK WITH THE HTA OFFICE TO REFINE THE RESEARCH QUESTIONS AND ANSWER OTHER TECHNICAL QUESTIONS

TITLE	ORGANIZATION	NAME	EMAIL ADDRESS	PHONE
Head of Surgery	Pain Center X	Dr. John Smith	john.smith@paincenterx.ca	555-555-5555
Neurosurgeon	Pain Center X	Dr. Jean Dupont	jean.dupont@paincenterx.ca	555-555-5555
Anesthesiologist	Pain BC	Dr. Mario Rossi	mario.rossi@painbc.ca	555-555-5555

HEALTH CANADA STATUS

■ APPROVED BY HEALTH CANADA (INDICATE THE LICENSE NUMBER, IF KNOWN) ☐ NOT APPROVED BY HEALTH CANADA (PLEASE EXPLAIN)

License No.: 55555

LIST/LINKS OF UP TO 5 OF THE MOST SIGNIFICANT EVIDENCE SOURCES DIRECTLY RELATED TO THE PRIMARY POLICY QUESTION (E.G. SYSTEMATIC REVIEW, HTA FROM ANOTHER JURISDICTION, RANDOMIZED CONTROLLED TRIAL)

https://www.hiqa.ie/sites/default/files/2017-01/Spinal_cord_stimulation_2013.pdf
Evaluate the appropriateness and potential impact of introducing clinical referral or treatment thresholds for implantation of a spinal cord stimulation device.

https://kce.fgov.be/sites/default/files/atoms/files/KCE_189C_neuromodulation_chronic_pain_0.pdf
Assess clinical effectiveness, safety, cost-effectiveness of spinal cord stimulation (SCS).

https://www.nice.org.uk/guidance/ipg451/documents/peripheral-nervefield-stimulation-for-chronic-low-back-pain-overview2
Summary of evidence, strength and weakness of published and unpublished literature for each type of nerve stimulation procedure for each type of refractory pain.

DISEASE SEVERITY DESCRIPTION (IN WHICH WAYS AND HOW MUCH DOES IT AFFECT PATIENTS)

The severity of pain for patients in this group can vary resulting in a range of impacts, from limitations on intensity of physical activity to inability to perform essential activities.

FURTHER DESCRIPTION OF THE SELECTION/INCLUSION CRITERIA FOR THE PATIENT POPULATION (CONDITION, GENDER, AGE, ETC.)

Patient selection is recommended based on a number of elements: prognostic factors, pain type, previous treatments, contraindications. Common major factors for patient selection include patients with CRPS I, II, FBSS, traumatic neuropathy and brachial plexopathy.

Of note, international guidelines (EFIC, EFNS, NACC, EAN) recommend several specific pain conditions and types as indications for spinal cord stimulation therapy.

ESTIMATED SIZE OF THE BC POPULATION IMPACTED FROM THE PROPOSED USE, OR REVIEW OF OPTIMAL USE, FOR THIS TECHNOLOGY

No BC estimate, however, at Pain Center X we estimate 35 patients per year would be eligible for spinal cord stimulation.

(IF APPLICABLE) LIST AND BRIEF DETAILS OF VULNERABLE POPULATIONS AFFECTED (EITHER POSITIVELY OR NEGATIVELY) BY THIS TECHNOLOGY

Not expected.

ALTERNATIVES FOR TREATING THE PRIMARY INDICATION FOR THE DESCRIBED PATIENT POPULATION

Similar options for treating this indication and patient population may include neurostimulation or an intrathecal drug pump.

EXPECTED COSTS OR COST SAVINGS ASSOCIATED WITH THE USE OF THIS TECHNOLOGY

The UK linked assessment estimated a cost of 10,480 GBP per QALY gained.

PRIMARY COSTS ASSOCIATED WITH THE STATUS QUO / COMPARATOR

Unknown.

CLINICAL EFFICACY OUTCOMES EXPECTED FROM THE *(IF NEW) INTRODUCTION/EXPANSION OR (IF RE-ASSESS) REDUCTION* OF THIS TECHNOLOGY

The primary clinical efficacy outcome expected from the use of neuromodulation over the status quo is increased quality adjusted life years (QALYs)

NON-CLINICAL OUTCOMES (BENEFITS) EXPECTED FROM THE *(IF NEW) INTRODUCTION/EXPANSION OR (IF RE-ASSESS) REDUCTION* OF THIS TECHNOLOGY

Improved patient experience & choice, reduced caregiver burden, potential for some patients to return to normal activities including work.