

Update from Health Canada's Medical Devices Directorate

Rosslynn Miller-Lee

Executive Director

Bureau of Evaluation and Bureau of Evaluation – COVID-19
Medical Devices Directorate

October 2023
CAPRA



Outline

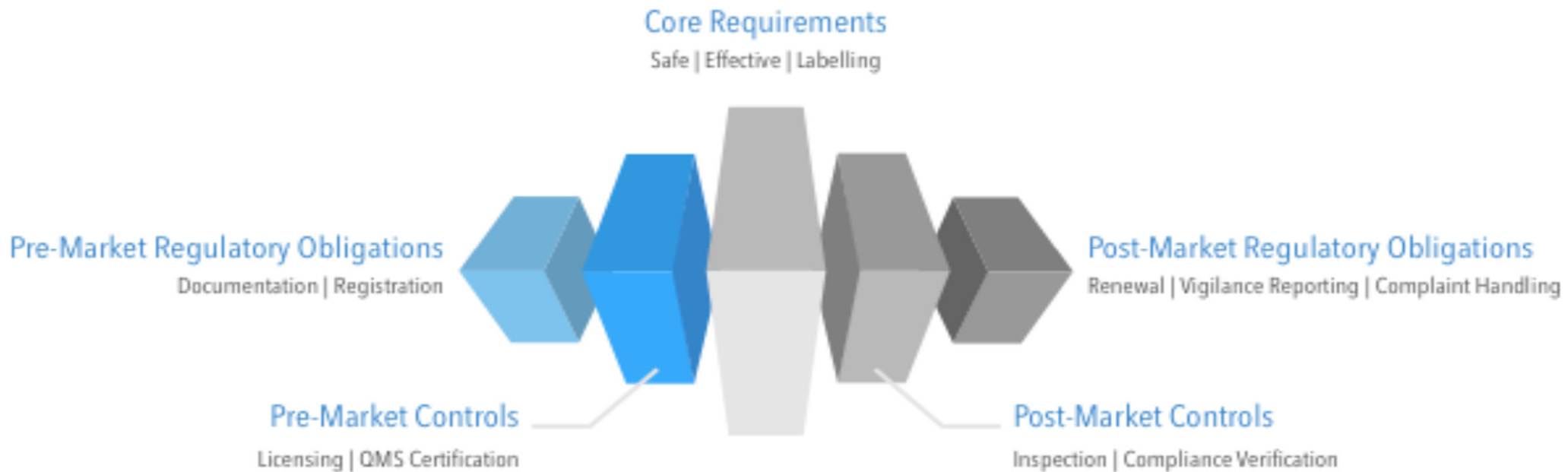
After 3 years of responding to the pandemic, Health Canada's Medical Devices Directorate is re-normalizing performance against service standards and is undertaking new initiatives relating to a broad scope of medical devices, including consultations on 3 major pieces of guidance.

- Overview of Medical Devices Regulation
- Performance
- Key Initiatives

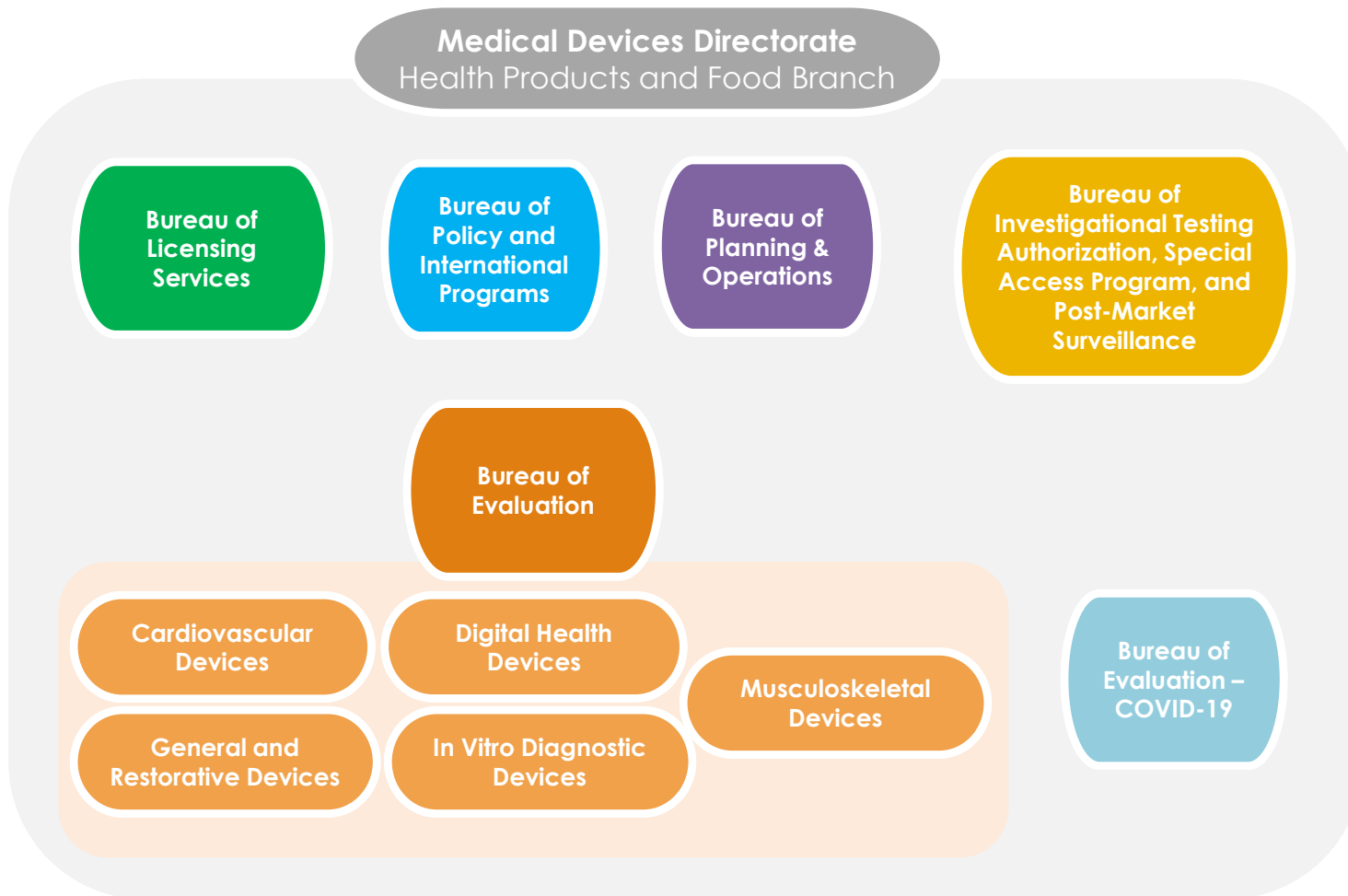
MEDICAL DEVICES REGULATION IN CANADA

Health Canada's Role

- Health Canada is responsible for regulating the sale, advertising, and importation of medical devices in Canada
 - Does not include devices intended for use in relation to animals
- Health Canada reviews the safety and effectiveness of the medical devices in accordance with the *Medical Devices Regulations*
- Health Canada does not regulate the usage of medical devices



Medical Device Program - Organization



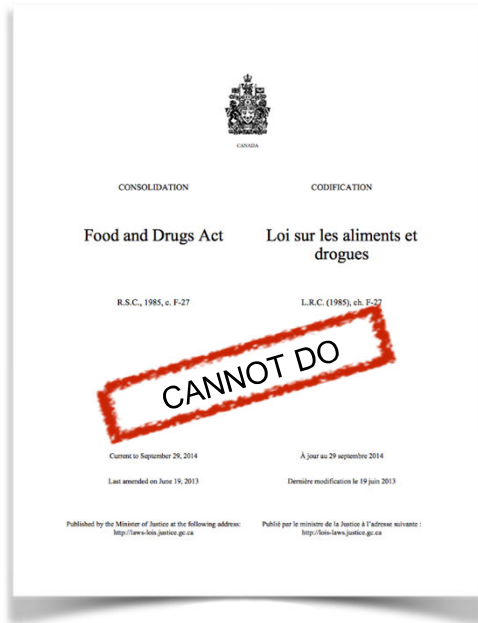
**Regulatory,
Operations, and
Enforcement Branch**

**Marketed Health
Products Directorate**
Health Products and
Food Branch

Bruce Randall, acting DG
bruce.randall@hc-sc.gc.ca

Emily Hollink, acting Director BISP
emily.hollink@hc-sc.gc.ca

Regulatory Context



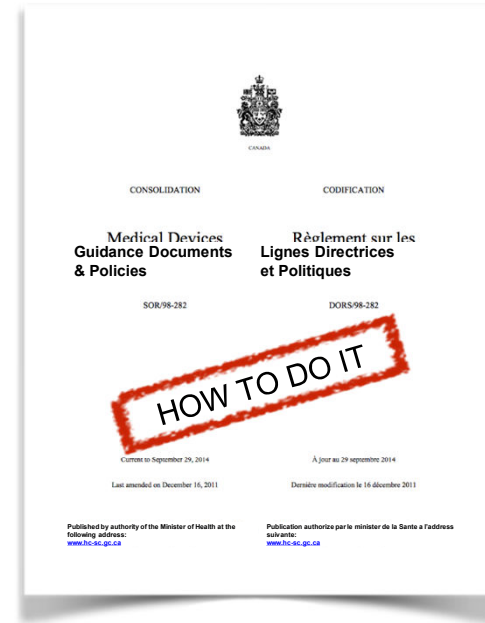
Acts

Food and Drugs Act



Regulations

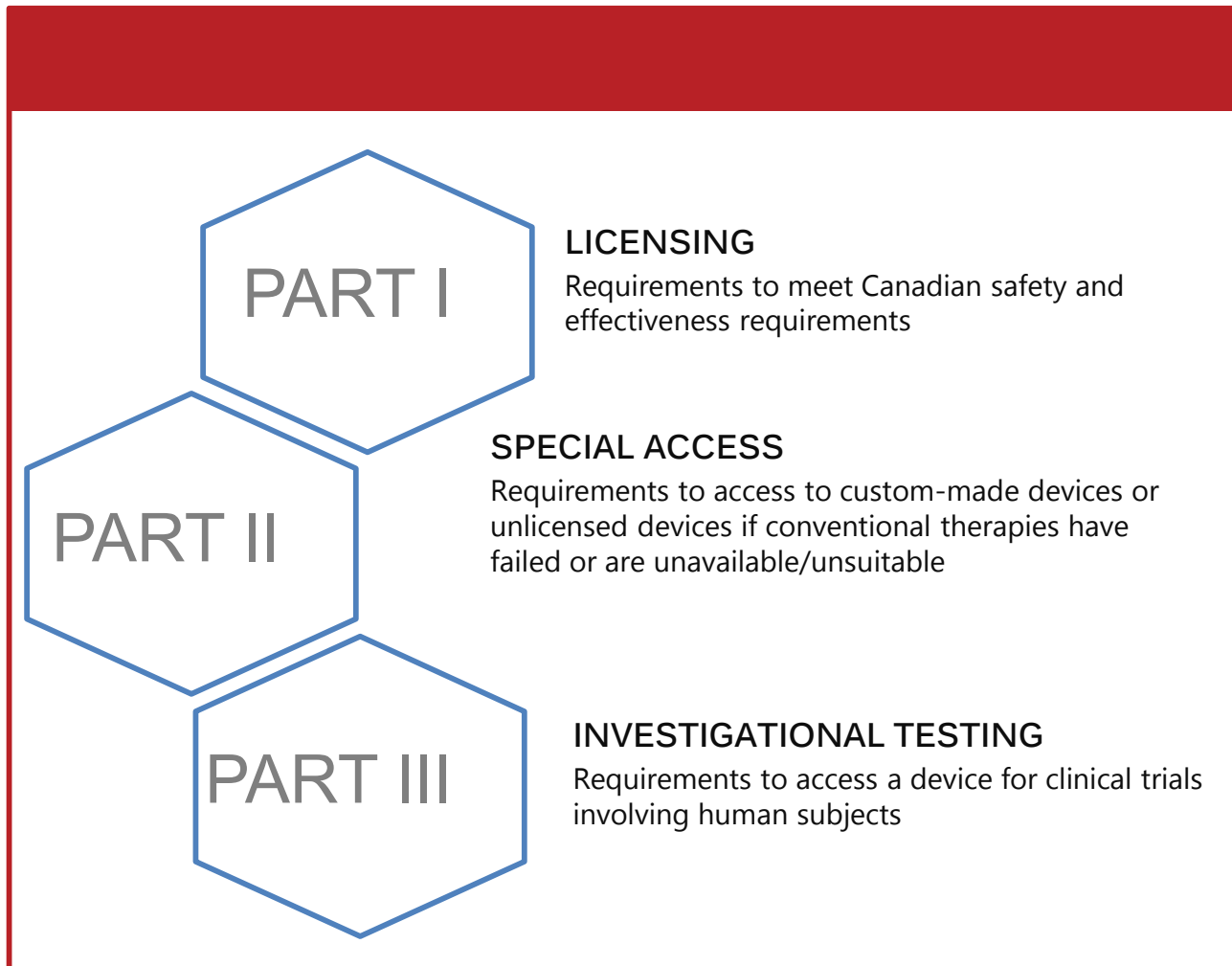
Medical Devices Regulations



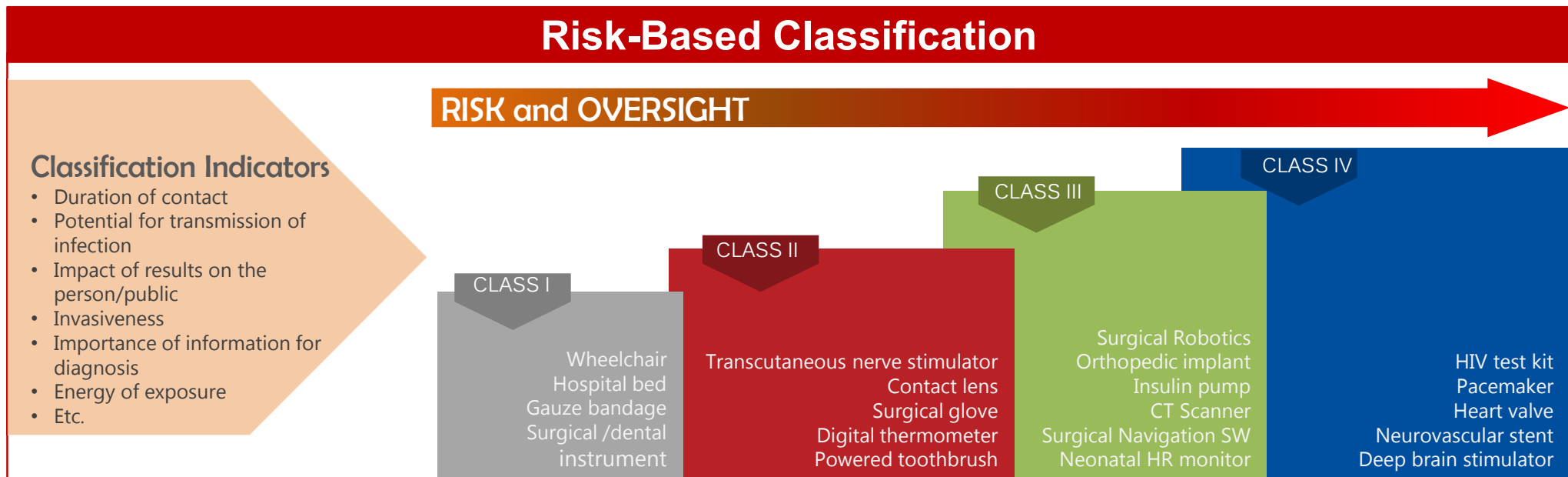
Policies and Guidance Documents

(Various)

Medical Devices Regulations

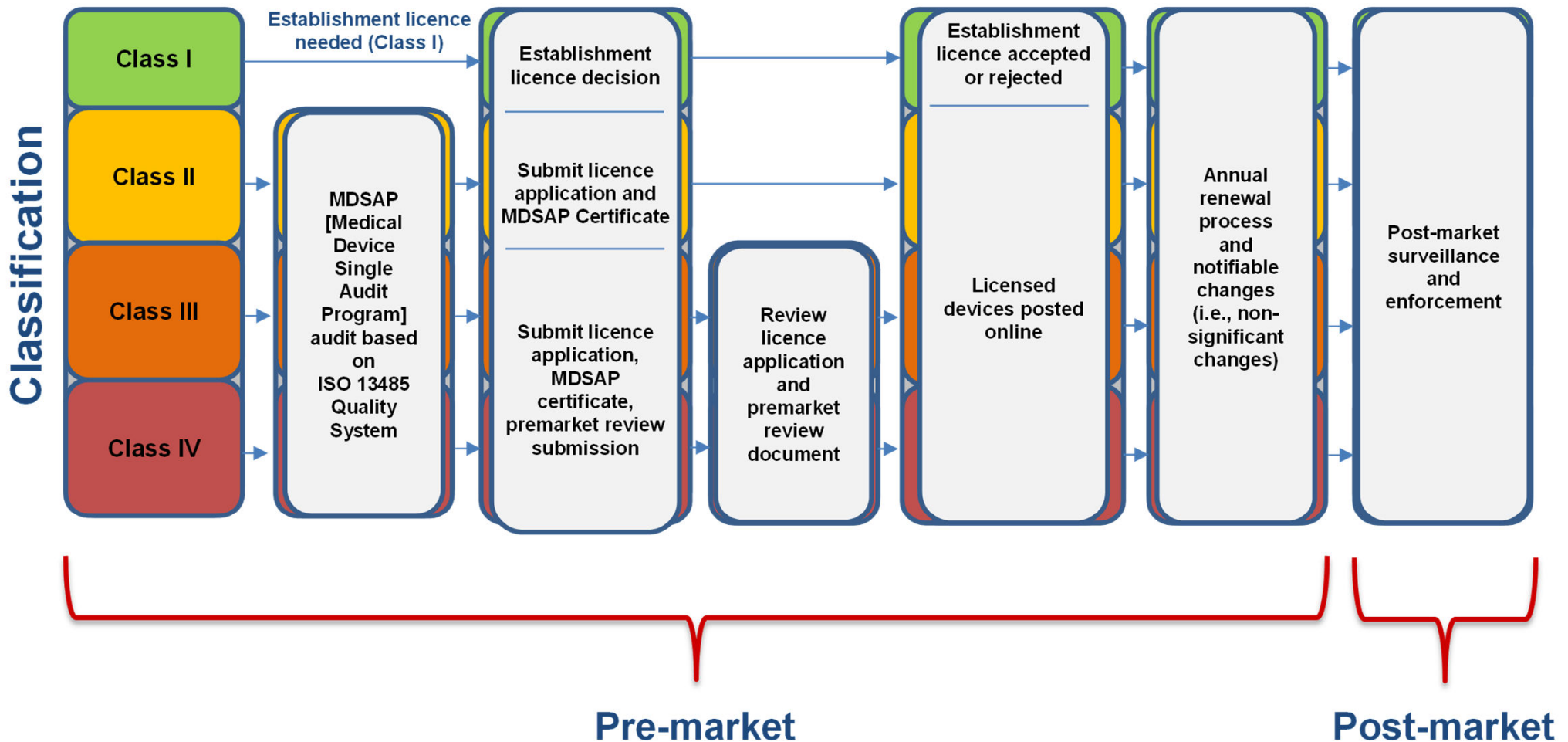


Regulation of Medical Devices – Risk-Based Classification System



- Guidance Document - Guidance on the Risk-based Classification System for Non-In Vitro Diagnostic Devices (non-IVDDs)

Medical Device Regulation - Process



Application Process – Class I

- Medical Device Establishment Licencing (MDEL) Registration through Regulatory Operations and Enforcement Branch (ROEB)
- Manufacturer is authorized to sell any class I devices
 - No listing of what is authorized for sale



Pre-market applications

- New application
 - New medical devices licences for Class II, III and IV

Guidance on how to complete the application for a new medical device licence



Canada

- Amendment applications for Class II, III, and IV licences
 - During a device’s lifecycle, there may be changes to manufacturing process, material, labelling, name, design, etc.
 - Amendment application required if change in:
 - device class;
 - manufacturer information;
 - device name/identifier;
 - medical conditions, purposes or uses for which the device is manufactured, sold or represented (Class II);
 - significant change (Class III/IV)
 - means a **change that could reasonably be expected to affect the safety or effectiveness of a medical device**

GUIDANCE DOCUMENT
for the Interpretation of Significant Change

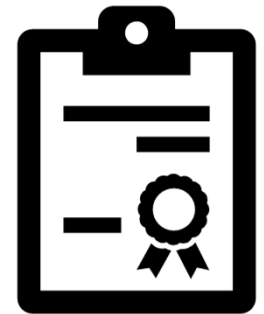
Published by authority of the
Minister of Health

What's Included in a Class III Submission?

- Table of contents
- Administrative information
 - Application form and fee form
 - Quality Management certificate
- Pre-submission correspondence
- Additional pre-market information
 - Cover letter / Executive Summary
 - Device Description / Design Philosophy
 - Intended use / Indications / Contraindications
 - Labelling
 - Marketing History
- Safety and effectiveness
 - List of standards
 - Preclinical studies
 - Bench testing
 - Software verification and validation
 - Biocompatibility
 - Animal studies
 - Clinical evidence
 - Literature studies / bibliography
 - Sterilization
 - Sterilization validation / Residual toxicity / pyrogenicity
 - Packaging
 - Shelf life validation
 - Product
 - Packaging

What's Included in a Class IV Submission?

- Class III submission **PLUS**:
 - Implant registration information (implant registration card)
 - Manufacturing and quality control
 - Material specifications
 - Biological safety evidence for devices containing biological material
 - Device specific quality plan
 - Manufacturing process and quality control
 - Process validation studies
 - Risk assessment



Meetings

Three types of voluntary meetings for devices

- Innovation information meetings
 - Engage with manufacturers of innovative medical devices in advance
 - Learn about emerging technology and forecast resources
- Pre-clinical meetings
 - Held prior to filing Investigational Testing Authorization (ITA) applications
- Pre-submission meetings
 - Held prior to submitting medical device license application



Pre-clinical/-submission meetings help improve submission quality, identify concerns, reach consensus on submission presentation, etc.

Guidance: <https://www.canada.ca/en/health-canada/programs/consultation-medical-device-meetings-draft-guidance/guidance-implementation.html>

Further exploration

- List of guidance documents:
 - <https://www.canada.ca/en/health-canada/services/drugs-health-products/medical-devices/application-information/guidance-documents.html>



- Consider the following course:
 - *Understanding how medical devices are regulated in Canada*



<https://training-formation.phac-aspc.gc.ca/course/index.php?categoryid=42&lang=en>

PERFORMANCE

Cost Recovery Decisions By Application Type

Application Type	Target Days	APR	MAY	JUN	JUL	AUG	YTD	2022-23
Class II New	15	100%	100%	99%	96%	95%	98%	99%
Class II Amendments	15	100%	98%	100%	96%	99%	98%	99%
Class II, III & IV Private Label	15	100%	100%	100%	83%	96%	97%	100%
Class III	60	100%	100%	100%	100%	100%	100%	99%
Class IV	75	100%	100%	100%	100%	100%	100%	99%

Legend	<90%	90-99%	100%

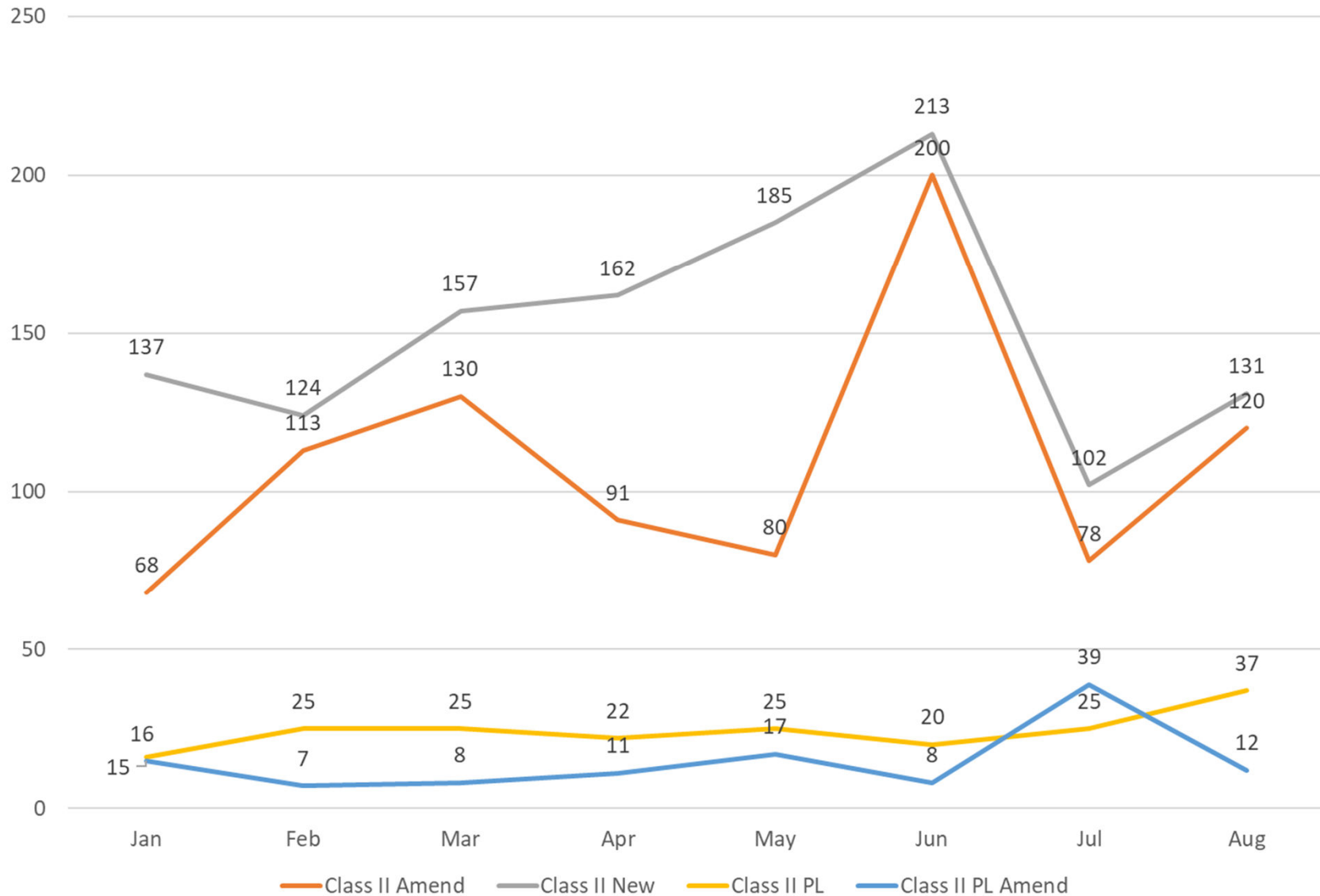
Non-Cost Recovery Performance By Application Type

Application Type	Target Days	APR	MAY	JUN	JUL	AUG	YTD	2022-23
Screening Class III & IV	15	83%	61%	61%	33%	46%	61%	83%
Second Decisions Class III & IV	45	78%	77%	77%	79%	72%	77%	86%
Minor Change	7	99%	82%	99%	35%	30%	71%	98%
Special Access	3	88%	86%	94%	92%	95%	90%	89%
ITA	30	98%	91%	98%	98%	98%	96%	89%

Legend	<80%	80-89%	90-100%

Volume of Class II Applications

Number of Class II Applications Received By Month in 2023



Part 1.1 Performance

- 97% of Part 1.1 decisions made on time (36/37)

		Target Days	MAR	APR	MAY	JUN	JUL	AUG	YTD Perf*	YTD Volume
Class I	Screening	15	N/A	N/A	N/A	N/A	0%	N/A	0%	1
	Review	25	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Class II	Screening	15	100%	N/A	N/A	N/A	N/A	N/A	100%	2
	Review	25	N/A	100%	100%	N/A	N/A	N/A	100%	2
Class III	Screening	15	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	Review	40	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Class IV	Screening	15	100%	100%	100%	100%	100%	100%	100%	24
	Review	40	100%	100%	N/A	100%	100%	100%	100%	15

* as of March 1 until August 31, 2023

Legend	<80%	80-89%	90-100%
---------------	------	--------	---------

KEY INITIATIVES

Key Regulatory Initiatives



Part 1.1

Proposed changes to address future public health emergencies



Agile Regulations

Expanded use of Terms and Conditions

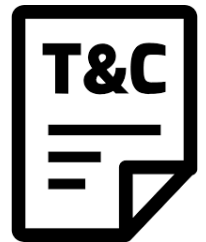
Proposed Regulations to Address Future Public Health Emergencies

- On February 22, 2023, Health Canada established a permanent regulatory framework for COVID-19 medical devices, resulting in the creation of Part 1.1 of the Medical Devices Regulations
 - Part 1.1 maintains many of the flexibilities afforded by the previous temporary regulations (known as Interim Orders)
- In order to enable faster access to devices that have an Urgent Public Health Need, Health Canada is proposing to amend these Regulations to expand the scope to address future public health emergencies
- A [public consultation](#) was held in Spring 2023 to help inform the Regulations and accompanying policy



Expanding Device Terms and Conditions

- As part of our **Agile Licensing** initiative, Health Canada is proposing expanded Terms and Conditions (T&Cs) regulations to support the life cycle approach for regulating medical devices
- These proposed regulations would provide us with authorities to:
 - expand the scope of use of T&Cs and;
 - impose or amend T&Cs at any time during the medical device lifecycle
- Health Canada also plans to publish information about T&Cs that have been imposed on medical device licences, to increase transparency and communicate risks
- A [public consultation](#) on the proposed regulations and draft guidance document was held in Spring 2023, stakeholder feedback is currently being analyzed



Key Guidance Initiatives



Guidance on Machine Learning- enabled Medical Devices

Current consultation



Licence Application Type Guidance

Current consultation



Significant Change Guidance Document

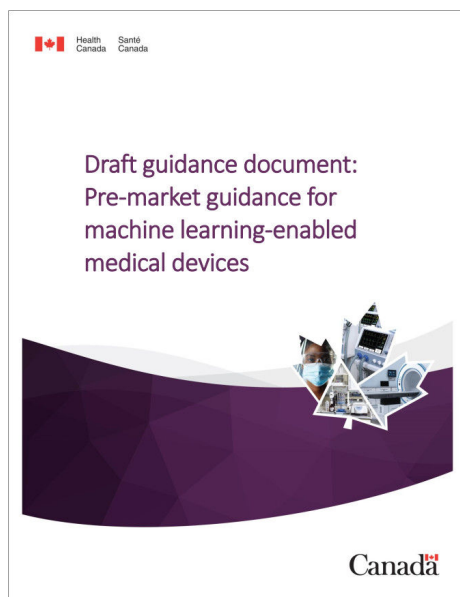
Upcoming consultation



LORS Guidance

Upcoming consultation

Public Consultation: Draft Guidance on Machine Learning-enabled Medical Devices (MLMD)

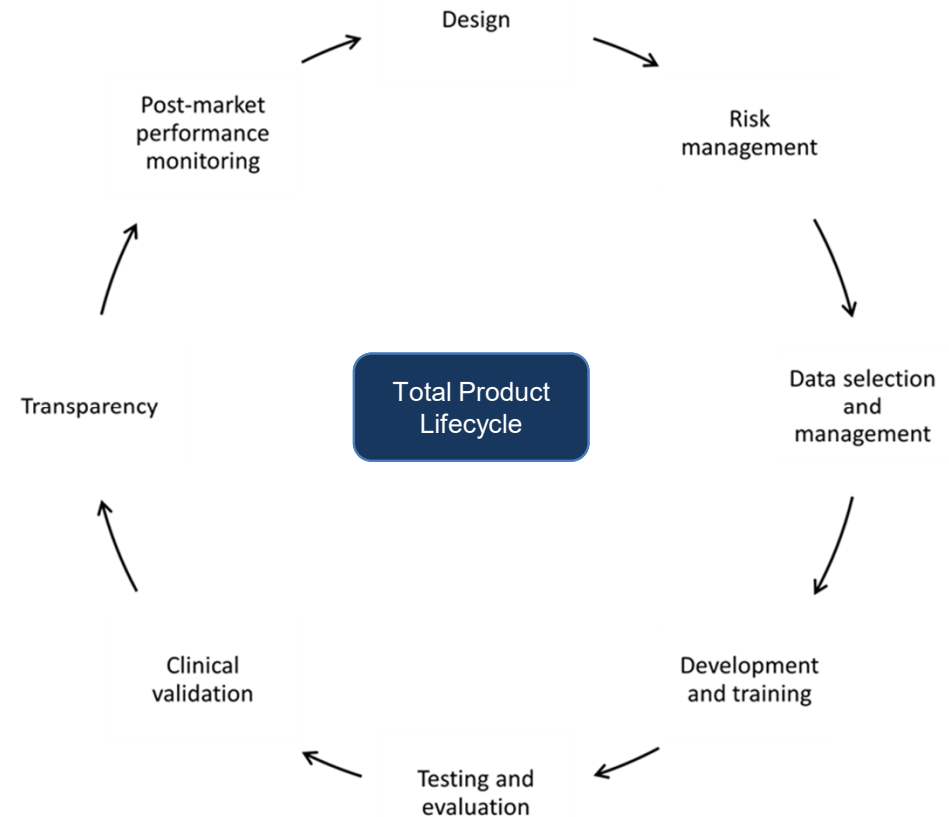


Draft Guidance [Consultation](#) launched in August 2023

- Intended to help manufacturers submitting an application for an MLMD
 - Does not cover non-ML guidance
- Outlines expectations for demonstrating safety and effectiveness
- Consultation closes on October 29th, 2023

Draft Guidance for MLMD

- Adaptive nature of MLMD requires a new, total product lifecycle (TPLC) regulatory approach
 - Facilitate rapid improvements and allow devices to continually improve while providing effective safeguards
- To address significant changes associated with adaptive MLMD, the draft guidance proposes a **“Pre-determined Change Control Plan” (PCCP)**
 - Documentation intended to characterize a device and its bounds, the intended changes to the MLMD, the protocol for change management and the change impacts
 - Considered an intrinsic component of device design
 - Risk-based and supported by evidence
- License amendment applications still required for:
 - Changes to the medical conditions, purposes or uses of an MLMD
 - Significant changes that occur outside of PCCP



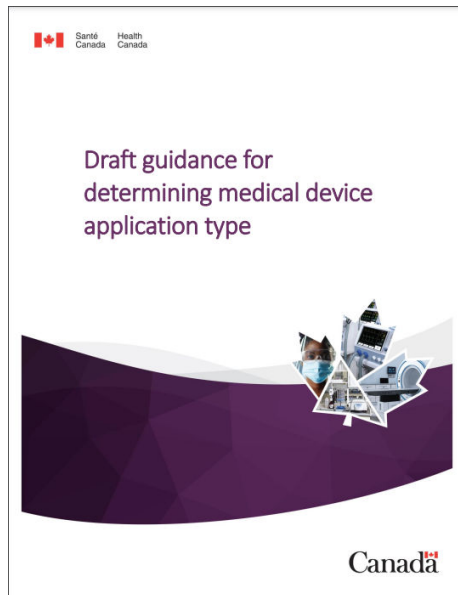
Draft Guidance for MLMD

Guidance includes

- Key definitions / policy statements
- Good machine learning practices (GMLP)
- Sex and gender-based analysis plus
- Recommendations for each phase of the MLMD lifecycle

Component	Example considerations from guidance
Design	Intended use, ML methods, input parameters, output, compatible devices
Risk Analysis and Management	Bias, impact of false negatives/positives, over/under fitting, automation bias
Data Management and Selection	Descriptions of training, tuning and test data sets, data augmentation, data exclusion
Development and Training	Development methods, input parameters, reference standards
Testing and Evaluation	Testing methods, performance metrics, inter-compatibility with other devices, robustness testing
Clinical Validation	Representativeness of the intended population
Transparency	Inputs, compatibility, dataset characterization, performance metrics, known limitations
Post-market Performance Monitoring	Processes and risk mitigations in place to ensure ongoing performance and inter-compatibility


Public Consultation: Draft Guidance on Determining Medical Device Application Type



Draft Guidance [Consultation](#) launched in September 2023

- Explains the different application types
- Assist applicants to determine whether certain devices, including components and parts, should be combined and submitted as 1 application
- Takes into account authorizations issued for COVID devices
- Consultation closes on November 10th, 2023
- Will replace the current *Guidance for the Interpretation of Sections 28 to 31: Licence Application Type*

Upcoming Public Consultation



GUIDANCE DOCUMENT
for the Interpretation of Significant Change

Published by authority of the
Minister of Health

Draft Guidance: How to Interpret Significant Change of a Medical Device


- Guidance assists manufacturers in determining when a change proposed to a licensed Class III or Class IV medical device is considered significant and requires an amendment to a medical device licence
- Guidance is being updated to reflect Health Canada's current thinking and include additional examples
- When finalized, will replace the existing *Guidance for the Interpretation of Significant Change of a Medical Device*
- Public consultation is targeted for later this year

Upcoming Public Consultation




GUIDANCE DOCUMENT

Recognition and Use of Standards under the *Medical Devices Regulations*



Published by authority of the
Minister of Health



Draft Guidance: Updated Guidance on the Recognition and Use of Standards for medical devices

- Proposing to streamline the acceptance of newer versions of standards that we have previously validated as being acceptable.
- When finalized, will replace the existing *Guidance for the Recognition and Use of Standards under the Medical Devices Regulations*
- Public consultation is targeted for next year

Key Submission Initiatives



REP



e-STAR



ITA Notice

REP

- We are implementing the [regulatory enrolment process \(REP\)](#) and use of the Common Electronic Submissions Gateway (CESG) for medical device regulatory activities.
- The REP will be implemented in January 2024 on a voluntary basis
- Expected to become mandatory within 18 months
- REP requires the submission be in ToC format
- The following activities are not part of the REP:
 - investigational testing applications (ITA)
 - medical device establishment licence (MDEL) applications
 - for example, Class I medical devices
 - Special Access Program (SAP) applications
 - medical devices regulated under Part 1.1 of the *Medical Devices Regulations* (for use in relation to COVID-19)

e-STAR

- electronic Submission Template And Resource (e-STAR)
- Dynamic interactive pdf to build submissions
 - Contains automation, guides, integrated databases, integrated policies and procedures, and automatic verification in a single package
- Includes harmonized and region-specific content
- Leverages the IMDRF Table of Contents
- Health Canada and the US FDA are conducting a joint pilot using eSTAR
 - Launched in January 2023 with 9 participants
 - Applications in scope:
 - HC: Class III or IV
 - FDA: 510(k), De Novo, PMA
 - PMA can be original, 180-days, real time, or panel track supplements
 - Exclusions: combination products, IVDs, CBER-led or FDA dual 510(k)/CLIA waiver
 - Health Canada also conducting a domestic pilot with 10 participants
- Next steps
 - HC and US FDA will assess the results of the pilot and analyze participant feedback
 - Continuing conversations to add additional jurisdictions to e-STAR

e-STAR

electronic Submission Template And Resource (SECURED) - Adobe Acrobat Pro DC (32-bit)

File Edit View E-Sign Window Help

Home Tools electronic Submissi... x

1 / 3 74.7%

electronic Submission Template And Resource (eSTAR)

For non-In Vitro Diagnostic Medical Devices Version 2.2 (2023-01-10)

STATUS: eSTAR INCOMPLETE This eSTAR is incomplete.

Introduction

This template is intended for use in both constructing a non-in vitro diagnostic medical device premarket application/ submission, and in being a resource of non-in vitro medical device premarket regulations. It contains regulatory information pulled from both [International Medical Device Regulators Forum \(IMDRF\)](#) documents, as well as regulatory documents (e.g., guidance documents).

This template is only used for constructing, not submitting, your application or submission. Directions at the end of the template provide instructions on how to submit it.

Key

- A **Red Bar** indicates the associated required question, or a required question in that section, wasn't answered.
- A **Green Bar** indicates the associated required question, or all required questions in that section, was answered.
- A **Grey Bar** indicates the associated question is optional. Green and Grey Bars act as left borders when present.
- Blue Help Text Buttons** when clicked display regulatory information pertaining to the question or section heading they immediately follow. Assistive Technology (AT) users including text to speech, will hear "Help Text Button." If activated, the help text windows will open, and can be closed by tabbing to the OK key and pressing return.
- Hover Text** Hover text displays information about your application, such as the date an attachment was attached, or, if the section corresponds to an [IMDRF](#) harmonized section, the hover text will display the chapter number of the [IMDRF Table of Contents](#).

FAQ

Q: Where can I send questions, feedback, and/or bug reports?

e-STAR

electronic Submission Template And Resource (SECURED) - Adobe Acrobat Pro DC (32-bit)

File Edit View E-Sign Window Help

Home Tools electronic Submissi... x

2 / 15 | 74.7%

Bookmarks

- General Introduction
- Application/Submission Type
- Cover Letter/Letters of Reference
- Administrative Information
 - Application Forms
 - Applicant Information
 - Correspondent/Consultant Information
 - Pre-Submission Correspondence and Previous Regulator Interaction
 - Standards
- Device Description
 - Devices
 - General Considerations
 - General Characteristics

Application/Submission Type

Application Jurisdiction US FDA Health Canada ?

Application Purpose Class II Class III Class IV ?

Hide Application Introduction

Please find related Health Canada IMDRF table of contents guidance for completing this form

Draft Health Canada IMDRF table of contents for medical device applications guidance:
<https://www.canada.ca/en/health-canada/services/drugs-health-products/medical-devices/application-information/guidance-documents/international-medical-device-regulators-forum.html>

Medical Device Application Submission related resources:

Guidance documents – Medical devices:
<https://www.canada.ca/en/health-canada/services/drugs-health-products/medical-devices/application-information/guidance-documents.html>

Medical device application forms:
<https://www.canada.ca/en/health-canada/services/drugs-health-products/medical-devices/application-information/forms.html>

Application Sub-Type New Application/Submission Change to Application/Submission ? Additional Information

(Modify the Original eSTAR when responding to Additional Information requests. See Help Text)

e-STAR

electronic Submission Template And Resource (SECURED) - Adobe Acrobat Pro DC (32-bit)

File Edit View E-Sign Window Help

Home Tools electronic Submissi... x

3 / 15 74.7%

Cover Letter / Letters of Reference

Add Attachment	Attach your Cover Letter	?
Add Attachment	Attach any Letters of Reference	?

Application Form

Add Attachment	Attach your Medical Device Licence Application Form	?
----------------	---	---

Pre-Submission Correspondence & Previous Regulator Interaction

Are there prior related submissions or regulator interaction for the subject device(s)? ?

Standards

Add Standard	Please list the standards used in your submission (if any). If only certain sections were used, or there were deviations, cite these in an attachment. A recognition number is only applicable to certain regulators, see help text. Instead of typing in information, some regulators request standards information be attached, see help text.	?
--------------	--	---

Bookmarks

- General Introduction
- Application/Submission Type
- Cover Letter/Letters of Reference
- Administrative Information
 - Application Forms
 - Applicant Information
 - Correspondent/Consultant Information
 - Pre-Submission Correspondence and Previous Regulator Interaction
 - Standards
- Device Description

e-STAR

Current state



Future state



Investigational Testing Authorizations

The *Food and Drugs Act* prohibits the conduct of clinical trials without an authorization under the relevant Health Canada regulations:

Prohibition — clinical trials

Section 3.1

No person shall conduct a clinical trial in respect of a drug, device or prescribed food for a special dietary purpose unless the person holds an authorization issued under the regulations that authorizes the conduct of the clinical trial.

However, the MDR do not include provisions for investigator-initiated clinical trials using unlicensed devices.

Investigational Testing Authorizations

An ITA is **required** for:

- The importation and/or sale (lease, distribution; even if no monetary compensation) of:
 - an unlicensed Class II, III, or IV device for a clinical investigation;
 - licensed devices used for an unlicensed indication;
 - devices authorized under Part 1.1 (in relation to COVID-19) of the *MDR* used for an unauthorized indication

An ITA is **not required** for:

- The product does not meet the definition of a “medical device”
- Class I devices
 - The manufacturer or importer must possess all records and information listed in section 80(3) of the Medical Devices Regulations (regulations)
- A clinical trial using a licensed medical device according to the Canadian-licensed indications for use and/or intended use
 - Whether sponsored by a manufacturer or qualified investigator

Investigational Testing Authorizations

All other situations **will be subject** to a Notification process.

- Investigators and manufacturers will be required to submit a Investigational Testing Notification Form (ITNF) to Health Canada before starting all other clinical trial activities with Class II, III and IV medical devices:
 - Safety Focus
 - Notice, GCwiki page (Q&A and ITNF)
 - hc.it-ee.sc@canada.ca
- For example, this applies to investigator-initiated clinical trials using a licensed medical device, but not according to the Canadian-licensed indications for use and/or intended use.
 - This is regardless of the intended use of the study data (whether in support of a licence amendment or not)
- 12-months - information gathering
- Notice will be published shortly

FINAL COMMENTS

Submission Quality

Clear

Relevant

Consistent

Accurate

Complete

Concise

Submission Quality

- Increase in the volume of documents being submitted with applications
 - Some are not relevant to the submission and should be removed
 - Others are lacking appropriate summaries to enable us to navigate the submission easily
- Summaries
 - Concern about decrease in quality
 - Summaries should include a written summary of the testing activities/studies/validation conducted and a short report on the results and conclusions of the testing
 - They should also point out any deviations/anomalies in the testing/results
 - Some summaries are now only a reference to the test reports that have been included in the application
- False and Misleading
 - 38 (1)** The Minister may refuse to issue or amend a medical device licence if
 - (b)** the applicant has made a false or misleading statement in the application;
- Consistency of information throughout submission
 - Errors or oversights trigger reviewer's attention and trigger searches for any further inconsistencies
- Requests for pre-assessment of responses to AI
 - We do not have resources to respond to these types of requests



General Inquiries

Medical Devices Directorate /

Direction des instruments médicaux

Health Canada / Santé Canada

meddevices-instrumentsmed@hc-sc.gc.ca