



Pre-Op Canada

PERIOPERATIVE MEDICAL EDUCATION

Pre-Op Canada:

Practical perioperative education for modern healthcare teams

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The Problem

- Pre-operative assessments vary significantly across Canada
- Many different healthcare professionals are involved in peri-operative medicine
- Increasing and aging Canadian population in need more surgery than ever before.
- Inconsistent Work-ups lead to
 - Delays
 - Cancellations
 - Increased healthcare costs
 - Patient frustration
- Training in Pre-op is often performed on the ground with residents. Family doctors and nurses are taught on the fly in the clinical setting.
- Conferences in pre-op give training 1-2 days per year to a narrow targeted audience.

The Opportunity

- Currently there is a gap in the Canadian healthcare education
- There are few Canadian-focused pre-op education platforms
- Family doctors and community physicians, nurses, pharmacists and trainees need concise practical tools
- Pre-op Canada's goal is to provide a practical evidence based educational platforms

What is Pre-op Canada?

- **Mission statement:**

“To provide accessible, evidence-based, and practical perioperative medicine education for healthcare professionals across Canada.”

Services

- Online courses
- Certification Modules
- Clinical Algorithms
- CME- accredited education (CPD)
- PDF templates for consults and medication management
- Clinical Algorithms

Target Audience

- Family Physicians
- Internists looking to refresh there pre-op knowledge
- Nurse practitioners and nurse clinicians
- Nurses
- Residents and medical students
- Pharmacists

Products and Services

- Educational
- Clinical Tools

Products and Services - Educational

- Online Course with 9 different modules and end of module assessments
 - **Introduction & General Approach to Pre-Operative Medicine**
 - **Cardiovascular Disease Assessment in Non-Cardiac Surgery**
 - **Assessing Surgical Risk**
 - **Chronic lung disease and OSA**
 - **Perioperative Diabetes Management**
 - **Chronic Kidney Disease in the Perioperative Setting**
 - **Anticoagulant & Antiplatelet Management**
 - **Adrenal Insufficiency , Chronic Steroid Use and Immunosuppression**
 - **Medication Management**
- **End of Module assessment: 5-15 MCQ questions, with 70% pass score**

1. Introduction & General Approach to Pre-Operative Medicine

- Outline Course Objectives and Modules
- Outline Competencies they will acquire
- Ideal Time line to complete the course – 3 weeks
- Explain Course Modules

2. Cardiovascular Disease Assessment in Non-Cardiac Surgery

- Importance of assessing cardiovascular risk
- How to assess risk of MACE
- RCRI (revised cardiac risk index)
- How to assess functional capacity
- Duke Activity Score Index
- Role of cardiac imaging (TTE / stress tests pre-op)
- Indication for BNP testing pre-op and post-op monitoring of troponins / EKGs

3. Assessing Surgical Risk

- What factors are involved with surgical risk assessment
 - Duration of surgery
 - Type of anesthesia used
 - Vascular vs non-vascular Sx
 - Bleeding risk

4. Chronic lung disease and OSA

- Managing Asthma and COPD peri-op
- Taking a thorough history of their disease
 - Frequency of exacerbations
 - Functional capacity
 - Use of steroids
- Role for pre-op testing (CXR / PFTs)
- OSA
 - Managing patients with known OSA
 - Identifying patients at risk of OSA
 - ? Role for pre-op OSA testing
 - How to manage your patient with OSA peri-c

5. Perioperative Diabetes Management

- Importance of adequate DM control peri-op
- Target glycemic control peri-op
- How to manage DM-2 medications peri-op
 - OHAs
 - GLP-1
 - STLG2 inhibitors
 - Insulin management
- Type 1 DM management
 - Indications to refer for IV insulin pre-op

6. Chronic Kidney Disease in the Perioperative Setting

- Importance of identifying patients with CKD
- Risk of AKI in patients with CKD
- Management of CKD peri-op
 - Avoid certain medication
 - Avoid hypotension
 - Judicious fluid management
- Managing patients on IHD – timing surgery/ dialysis appropriately

7. Anticoagulant & Antiplatelet Management

- Draw on data from thrombosis Canada and ASRA
- Anticoagulants
 - DOACs: when to stop and restart
 - Coumadin – who needs to be bridged
 - LMWH: how to manage
- Anti-platelets: Can and should we stop it pre-op?
 - ASA, Clopidogrel, Prasugrel, Ticagrelor
 - Primary Prevention
 - Secondary Prevention: PCI, CABG
 - Secondary Prevention: CVA, PAD

8. Adrenal Insufficiency, Chronic Steroid Use and Immunosuppression

- How to identify patients with adrenal insufficiency
- Managing patients on chronic steroids peri-op
- Managing different immunosuppressive agents peri-op
 - MTX / Sulfasalazine / Plaquenil / 5-ASA ect..
 - Anti-TNFs

9. Medication Management

- **Guideline for managing different classes of meds**
 - Beta – blockers
 - ACEs / ARBs
 - CCBs
 - Diuretics
 - Anti-epileptics
 - Ect...
- **PDF Document about how to manage different classes of medications**

Products and Services – Clinical Tools

- Consult Templates
- Medication Management Templates
- Clinical tools – (RCRI / DASI / STOP BANG)
- Evidence-based pre-operative algorithms aligned with Choosing Wisely Canada recommendations to optimize perioperative investigations and reduce unnecessary testing
- Standardized pre-operative algorithms designed to guide appropriate referral pathways based on patient comorbidities, clinical risk profile, and surgical complexity.