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| <b>Day Surgery Hip and Knee Arthroplasty Exclusion Criteria</b> |   |
| <b>Service Area:</b> Provincial Surgery - Orthopedics           | <b>Guideline Number:</b><br>XX-XXX-XXX V# |
| <b>Approved By:</b> Provincial Clinical Leadership Team (PCLT)  | <b>Approved Date:</b><br>Nov/21/2023      |

## 1.0 CLINICAL GUIDELINE STATEMENT:

- 1.1 The purpose of this guideline is to provide high-quality, efficient and safe orthopedic surgical care for hip and knee arthroplasty patients. It provides evidence-informed criteria for the exclusion of patients from [day surgery](#) hip and knee arthroplasty.
- 1.2 The guideline applies to orthopedic surgeons, anesthesiologists, and other clinical team members.

## 2.0 GUIDELINE:

### 2.1 Inclusion/Exclusion Criteria

#### 2.1.1 Important Note

- At any point in the perioperative journey, a change in a patient's medical status may require a transition from a day surgery case to an Inpatient case, at the discretion of the care team.

#### 2.1.2 Inclusion

- If applicable, the guideline identifies exceptions to day surgery hip and knee arthroplasty [exclusion criteria](#).
- The process by which an [exception](#) is permitted is often, but not always, determined by clinical team consensus upon evaluating the patient's overall condition.

### 2.2 Guideline

| No. | Category                   | Criteria for Exclusion   | Exception  |
|-----|----------------------------|--|--|
| 1.  | <b>Surgical Complexity</b> | Procedures that are expected to have significantly higher than usual operative time, blood loss, require corrective osteotomy or revision implants |  |
| 2.  | <b>Age</b>                 | > 80   | Exceptions may be made with consensus of the clinical team based on overall patient clinical condition |

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| 3.  | <b>Body Mass Index</b>           | > 40   | Exceptions may be made with consensus of the clinical team based on overall patient clinical condition  |
| 4.  | <b><a href="#">ASA Score</a></b> | <ul style="list-style-type: none"> <li>&gt;3</li> <li>Refer to <a href="#">ASA Physical Status Classification System</a> for more detailed information</li> </ul>  | Exceptions may be made with consensus of the clinical team based on overall patient condition   |
| 5.  | <b>Psychiatric</b>               | <p>Poorly controlled Psychiatric disorders, e.g.</p> <ul style="list-style-type: none"> <li>Anxiety</li> <li>Panic disorder</li> <li>Depression</li> </ul>   | Stable, well-controlled psychiatric disorders may be considered   |
| 6.  | <b>Renal</b>                     | <ul style="list-style-type: none"> <li>Creatinine clearance &lt;30 mL/min</li> <li>Acute kidney injury in the past with residual damage or at risk for having recurrent, intra-op renal dysfunction</li> </ul> | Exceptions may be made with consensus of the clinical team based on overall patient condition   |
| 7.  | <b>Urinary</b>                   | Previous need for long-term urinary Foley catheter post-op   | Exceptions may be made with consensus of the clinical team based on overall patient condition   |
| 8.  | <b>Diabetes</b>                  | Poorly controlled diabetes (e.g. HbA1C > 8%)   |   |
| 9.  | <b>Hematology</b>                | <ul style="list-style-type: none"> <li>Significant coagulation disorder</li> <li>Anemia: HgB &lt;120 g/L</li> </ul>  | Exceptions may be made with consensus of the clinical team based on overall patient condition   |
| 10. | <b>Cardiovascular</b>            | <p>Cardiac disease, which limits daily activity</p> <p>This includes cardiac conditions that would result in an ASA score &gt; 3. e.g. Congestive Heart Failure, Significant Aortic Stenosis</p>               | <ul style="list-style-type: none"> <li>Previous cardiac stent or valve replacement without cardiac symptoms are acceptable</li> <li>Exceptions <i>may be</i> made with consensus of the clinical team based on overall patient condition</li> </ul> |

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| <p><b>11.</b></p> | <p><b>Pulmonary - Obstructive Sleep Apnea</b></p> <p><i>Refer to <a href="#">Appendix A - Hip and Knee Arthroplasty Day Surgery Qualifications for Obstructive Sleep Apnea Patients</a></i></p> | <ul style="list-style-type: none"> <li>Moderate to Severe <a href="#">OSA</a> patients who have demonstrated non-compliance with <a href="#">CPAP</a></li> <li>OSA with significant secondary organ involvement, such as Right Heart Dysfunction Pulmonary Hypertension and associated Coronary Artery Disease</li> </ul> | <ul style="list-style-type: none"> <li>OSA patients without complications and CPAP compliant are acceptable</li> <li>High <a href="#">STOP-Bang</a> does not necessarily preclude day surgery but may require 90 min monitoring in the recovery room</li> </ul> |
| <p><b>12.</b></p> | <p><b>Pulmonary - Other</b></p>   | <ul style="list-style-type: none"> <li>Moderate to severe Chronic Obstructive Pulmonary Disease</li> <li>Pulmonary embolism or <a href="#">DVT</a> in the past year</li> </ul>  | <p>Exceptions may be made with consensus of the clinical team based on overall patient condition</p>  |
| <p><b>13.</b></p> | <p><b>Medications</b></p>   | <ul style="list-style-type: none"> <li>Chronic opioid dependence</li> <li>Complex peri-op anti-coagulation requirements</li> <li>Chronic, significant Benzodiazepine dosages</li> <li>Inability to tolerate post-op oral antibiotic</li> <li>Chronic Steroid usage</li> </ul>   | <ul style="list-style-type: none"> <li>Simple anti-coagulation management e.g. Rivaroxaban</li> <li>Inhaled steroids</li> </ul>   |
| <p><b>14.</b></p> | <p><b>Mobility</b></p>  | <p>Significant mobility problem, other than the joint to be replaced, imposing functional limitations that would prevent meeting discharge criteria</p>   |   |
| <p><b>15.</b></p> | <p><b>Social – Living Situation</b></p>   | <ul style="list-style-type: none"> <li>Transportation barriers to and from the hospital</li> <li>Unavailability of caregiver support (physical or mental) during the first postoperative days during home recovery, especially</li> </ul>   |   |

**DISCLAIMER:** Provincial Clinical Standards, Guidelines and Practice Tools are primarily concerned with patients and how they receive care and services and set out the responsibilities and expectations for the health care team in the delivery of clinical care. These resources do not replace, but are in addition to professional self-regulation and individual accountability for clinical judgment that are an integral part of health care.

|     |                                    |  |                                       |
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|     |                                    | the first night after discharge <ul style="list-style-type: none"> <li>• Unavailability of ambulance transport to an urgent care facility within 60 mins for first 24 hours post-op</li> </ul> |                                       |
| 16. | <b>Social - Alcohol</b>            | Patients unwilling to abstain from alcohol for at least 14 days before surgery   |                                       |
| 17. | <b>Social – Recreational Drugs</b> | Patients unwilling to abstain from non-medicinal <a href="#">THC</a> , Cannabis and/or other recreational drugs for at least 14 days before surgery  | <a href="#">CBD</a> oil is acceptable |
| 18. | <b>Social - Tobacco</b>            | Patients unwilling to abstain from smoking for at least 8 weeks before surgery   |                                       |
| 19. | <b>Other</b>                       | Inability to participate in the planning and implementation of their outpatient surgery care pathway   |                                       |

### 3.0

#### **APPLICATION:**

##### **3.1 For Patients**

- Assist patients and or their families in understanding the modifiable and non-modifiable exclusion criteria for day surgery hip and knee arthroplasty.

##### **3.2 For Clinicians**

- Utilize the exception criteria when assessing appropriateness for day surgery hip and knee arthroplasty.
- Engage in collaborative clinical team discussions to obtain a consensus based on the overall patient condition when determining whether an exception to exclusion criteria is warranted.

##### **3.3 For Health Service Organizations**

- Hyperlink directly to the provincial *Hip and Knee Arthroplasty Day Surgery Exclusion Criteria* clinical guidelines on the [Shared Health: Health Providers Clinical Projects, Standards, and Guidelines](#) webpage to replace conflicting local governance documents e.g. local policies and guidelines related to this subject matter.
- Ensure clinicians have accessible information, education and training.
- Monitor clinical guideline compliance.

### 4.0 **DEFINITIONS:**

**4.1 Day Surgery:** The patient is admitted and discharged on the same calendar day.

**Exception:** An individualized patient criterion that may still qualify the patient for Day Surgery even if the main criteria disqualifies the patient.

**Exclusion Criteria:** List of screening questions, utilized by the clinical team, that may disqualify patients from being a candidate for a day surgery hip and knee arthroplasty.

##### **4.2 Abbreviations**

**ASA:** American Society of Anesthesiologists

**CBD:** Cannabidiol

**CPAP:** Continuous Positive Airway Pressure

**DVT:** Deep Vein Thrombosis

**MOSE:** Manitoba Orthopedic Surgery Executive

**OSA:** Obstructive Sleep Apnea

**DVT:** Deep Vein Thrombosis

**STOP Bang:** Snoring, Tiredness, Observed Apneas, Pressure, BMI, Age, Neck Circumference, Gender (sex) - OSA risk Questionnaire

**THC:** Tetrahydrocannabinol; psychoactive constituent if cannabis

### 5.0 **CONTACT:**

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**Key Supporting Documents/Resources:**

[Appendix A](#) - Hip and Knee Arthroplasty Day Surgery Qualifications for Obstructive Sleep Apnea Patients

[ERAS - Clinical Pathway for Inpatient and Outpatient Hip and Knee Arthroplasty](#)

[ASA - Physical Status Classification System](#)

**References:**

Yang, L., Sun, Y., Li, G. and Liu, J. 2017. "Is Hemoglobin A1c and Perioperative Hyperglycemia Predictive of Periprosthetic Joint Infection Following Total Joint Arthroplasty?". *Medicine*. 96(51):p e8805. doi: 10.1097/MD.00000000000008805.

Tarabichi, M. et al. 2017. "Determining the Threshold for HbA1c as a Predictor for Adverse Outcomes After Total Joint Arthroplasty: A Multicenter, Retrospective Study". *The Journal of Arthroplasty*. 32(9S):S263-S267. doi: 10.1016/j.arth.2017.04.065.

**Document Review History**

| <b><u>Version #</u></b> | <b><u>Date</u></b> | <b><u>Reviewer</u></b>  | <b><u>Action</u></b>                   |
|-------------------------|--------------------|---|--|
| 1.0                     | 8-Aug-2023         | Dr. Eric Bohm and Dr. Sudarshana Rao                                | Primary Authors                        |
| 1.0                     | 14-Aug-2023        | Orthopedic Surgeon and Anesthesiologist Leads – SDO Representatives | Approved                               |
| 1.0                     | 14-Sep-2023        | Provincial Clinical Team, Surgery and Anesthesia                    | Approved (Dr. Buchel)                  |
| 1.0                     | 5-Oct-2023         | Provincial Clinical Team, Primary Care                              | Approved                               |
| 1.0                     | TBD                | Manitoba Orthopedic Surgery Executive                               | FYI Pending 2024 next meeting          |
| 1.0                     | 21-Nov-23          | Provincial Clinical Leadership Team                                 | Approved (via email from Tara Bergner) |

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### Appendix A - Hip and Knee Arthroplasty Day Surgery Qualifications for Obstructive Sleep Apnea Patients

