**Supplementary Table 1. Current Sleep Content in American Board of Anesthesiology Outline**

|  |  |  |
| --- | --- | --- |
| **Content** | **ABA Syllabus Section 22** | **RCPSC Anesthesiology Syllabus Section 23** |
| Basic Content | |  |
| Respiratory complications of anesthesia and of surgical incisions in the postoperative care of patients | I.B.7. b. | 26.3.3 |
| Control of ventilation including respiratory centers, respiratory muscles and reflexes | I.C.6) a | 1.2 (Airway evaluation and Management, Airway anatomy and physiology); 31.2.3 (Pulmonary physiology, Control of Breathing); 31.2.3.7 (Pulmonary physiology, Methods of assessing control of breathing and sensitivity to hypoxia) |
| Principles of function of noninvasive ventilator techniques, such as continuous positive airway pressure and biphasic positive airway pressure | I.A.2. j. 2 | 6.2.3.9 (Mechanical Ventilation) |
| Preparation for anesthesia refers to obstructive sleep apnea and obesity as specific problems that require in depth preparation | I.B.1.d.3 | 7.8 (7.8.1 to 7.8.3.2) |
| Select eligible patients for ambulatory anesthesia based on special considerations: Co-morbid conditions including OSA |  | 2.3.7.2 |
| Tonsillectomy and Adenoidectomy: Demonstrate knowledge of the concerns for and management of tonsil and adenoid surgery, particularly in the pediatric patient: Pediatric OSA |  | 7.5.1.2 |
| Surgery for OSA |  | 7.8 |
| Advanced exam expected knowledge | |  |
| In depth understanding of the function of noninvasive ventilator techniques, such as continuous positive airway pressure, biphasic positive airway pressure, and nasal continuous positive airway pressure | II.A. 1.c.1 | 6.2.3.9 |
| Electroencephalographic recognition of sleep | II.C.1.a. 3) b) | 27.22.3.1 (Sleep Studies) |
| Clinical science of the respiratory system, obstructive disease such as obstructive sleep apnea | II.C.2.d.1.a.(1) | 27.19.1.7 (OSA or Central Sleep Apnea) |
| Screening for sleep apnea with sleep study and STOP-BANG, and anesthetic implications | II.C.2.d. 2) | 2.3.5.4; and 7.8.1.1 |

OSA: Obstructive sleep apnea; STOP-BANG: STOP-Bang questionnaire

**Supplemental Table 2. Core Competencies defined by the Accreditation Council for Graduate Medical Education (ACGME), and the Royal College of Physicians and Surgeons of Canada (RCPSC) curriculum**

**ACGME Core competencies**21

1. Professionalism
2. Patient care and procedural skills
3. Medical Knowledge
4. Practice Based Learning and improvement
5. Interpersonal and Communication skills
6. Systems Based practice

**RCPSC CanMEDS equivalents**22

1. Medical Expert – ACGME equivalents: include 2 and 3
2. Scholar – ACGME 4
3. Professional – AGCME 1
4. Communicator -ACGME 5 (CanMEDs refers to communicator as communication between physician and patients/families)
5. Collaborator – ACGME 5 (CanMEDs refers to collaborator as communication between Health care professionals e.g. in OR, consultations etc, team communication)
6. Leader- ACGME 6 – management and understanding of systems
7. Health Advocate- ACGME 6 – Health advocacy is included under the systems-based practice heading.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **CanMEDS**  **ACGME** | **Medical Expert** | **Scholar** | **Professional** | **Communicator** | **Collaborator** | **Leader** | **Health Advocate** |
| **Professionalism** |  |  | **\*** |  |  |  |  |
| **Patient Care and Procedural Skills** | **\*** |  |  |  |  |  |  |
| **Medical Knowledge** | **\*** |  |  |  |  |  |  |
| **Practice Based Learning and improvement** |  | **\*** |  |  |  |  |  |
| **Interpersonal and Communication skills** |  |  |  | **\*** | **\*** |  |  |
| **Systems Based practice** |  |  |  |  |  | **\*** | **\*** |

**Supplemental Table 3. Entrusted Professional Activity # 1: Sleep and Anesthesia: Assessing, diagnosing, and managing patients with uncomplicated and common sleep conditions**

Key Features:

* This EPA builds on the skills of the primary discipline to focus on the establishment of a complete management plan.
* This EPA may be observed in the inpatient or outpatient setting.

Assessment Plan: Direct observation and/or case review by supervisor, may include input from other health professionals and patient or family

Form collects information on:

* Type of observation: direct; case review
* Settings: inpatient; outpatient
* Case mix (select all that apply): obstructive sleep apnea; central sleep apnea; hypoventilation syndrome; respiratory failure/ICU; restless legs syndrome, narcolepsy, idiopathic hypersomnia

Collect 5 observations of achievement

* A variety of the case mix
* At least 1 case of medium or high complexity
* At least 3 observers

Relevant Milestones or competencies achieved:

1. **Medical Expert: Apply pathophysiologic concepts to identify, diagnose, and address common clinical problems**
2. **Medical Expert: Elicit a history, perform a physical exam, select appropriate investigations, and interpret their results**
3. **Communicator: Seek and synthesize relevant information from other sources, including the patient’s family**
4. **Medical Expert: Develop a differential diagnosis relevant to the patient’s presentation**
5. **Medical Expert: Develop and implement a management plan**
6. **Medical Expert: Ensure that the patient and family are informed about the risks and benefits of each treatment option in the context of best evidence and guidelines**
7. **Communicator: Use strategies to verify and validate the understanding of the patient and family with regard to the diagnosis, prognosis, and management plan**

EPA: Entrusted Professional Activity; ICU: Intensive Care Unit; *Please refer to the Supplementary Table 2, for further details.*

**Supplemental Table 4: Entrusted Professional Activity # 2: Sleep and Anesthesia: Providing interpretation of sleep health assessment reports**

Key Features:

* This EPA includes the following diagnostic investigations: sleep studies (oximetry, Level 1 to 4 sleep study monitors, daytime sleep studies)
* This EPA may be observed in the inpatient or outpatient setting.
* The diagnostic tests may be performed for patients for whom the resident is providing clinical care, as well as for patients for whom the resident is solely providing diagnostic interpretation.
* The achievement of this EPA is based on review of diagnostic test interpretations and communication of critical results.

Assessment Plan: Review of diagnostic test interpretation by supervisor

Form collects information on:

* Type of observation: direct; case review
* Settings: inpatient; outpatient
* Setting (select all that apply): PSG (polysomnography) laboratory; operating room, post-anesthesia care unit, teaching rounds; other settings: in-hospital patient, acute pain service, transitional pain service, chronic pain clinic
* Number of tests in batch (write in): sleep diagnostics/study (including polysomnography and oximetry);
* Case mix (select all that apply): obstructive sleep apnea; central sleep apnea; hypoventilation syndrome; respiratory failure/ICU; sleep health disruption or insomnia, restless legs syndrome, narcolepsy, idiopathic hypersomnia

Collect 5 observations of achievement

* At least 5 PSG reports
* At least 5 oximetry reports
* A variety of the case mix
* At least 3 observers

Relevant Milestones or competencies achieved:

1. **Medical Expert: Apply knowledge of respiratory physiology to anesthesiology and sleep medicine**
2. **Medical Expert: Apply knowledge of the technical components of diagnostic testing including equipment and protocols**
3. **Medical Expert: Assess the quality and validity of the study, and any impact on the diagnostic interpretation**
4. **Scholar: Integrate best evidence and clinical expertise**
5. **Medical Expert: Interpret respiratory diagnostic investigations**
6. **Medical Expert: Summarize findings of clinical relevance, and provide suggestions for further testing and/or management as appropriate**
7. **Communicator: Optimizes the physical environment for patient comfort, privacy, engagement, and safety**
8. **Communicator: Provide clear, concise and accurate reports of diagnostic testing in a timely fashion**
9. **Communicator: Communicate critical results urgently, as needed**

EPA: Entrusted Professional Activity; *Please refer to the Supplementary Table 2, for further details.*