**Supplementary Table 2. Study details including study population, time period, and research objectives.**

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| **Study #** | **Practice guideline** | **Target population** | **Time period** | **Research questions or objectives** |
| 1 | Evaluation and management of obesity hypoventilation syndrome | Not defined | Evaluation andmanagement of patients with obesity hypoventilation syndrome (OHS) | * Should HCO3- and SpO2 rather than PaCO2 be used for OHS screen in obese adults with sleep-disordered breathing?
* Should adults with OHS be treated with CPAP or NIV?
* What is better: CPAP or NIV?
* Should hospitalized adult suspected OHS, be discharged with PAP treatment?

Should weight-loss intervention be used for adult OSA? |
| 2 | Preoperative screening and assessment of adult patients with OSA | Diagnosed or suspected adult OSA patients  | Preoperative risk assessment of diagnosed or suspected adult OSA patients  | * Does OSA diagnosis change postoperative outcomes?
* Should at risk patients be identified before surgery?
* Which tools can be used to identify suspected OSA preoperatively?
* What is clinical value of performing additional preoperative tests?
* What are best preoperative practices in patients who were diagnosed with OSA, nonadherent with CPAP therapy or have a high pretest probability for OSA?
* What is evidence on CPAP efficacy for perioperatively?
* What are best preoperative practices to improve outcomes for OSA patients who are adherent to PAP therapy?
* What are best preoperative practices to improve outcomes for OSA surgical patients who poorly adherent to PAP therapy?

What are best preoperative practices to improve outcomes for surgical patients with high probability of OSA? |
| 3 | Diagnosis and treatment of sleep disordered breathing in adults | Adults with OSA | Diagnosis and treatment of OSA patients | * In patients with obstructive sleep apnea syndrome (OSAS), what

are the current recommended maximum assessment wait times toinitiate treatment that correspond to better patient outcomes?* What is the role of portable monitoring in the diagnosis of sleep

disordered breathing?* Does treatment of asymptomatic adult obstructive sleep apnea

(OSA) patients improve health outcomes?* Do OSAS patients benefit more from autotitrating positive airway

pressure (APAP) than from using conventional continuous positiveairway pressure (CPAP)?* Is bariatric surgery an effective treatment strategy in obese patients with OSAS compared with standard care, exercise and diet?
* Does CPAP lead to improved outcomes in patients with heart

failure and central sleep apnea syndrome (CSAS) compared withthe standard medical therapy for heart failure (HF)?* Is complex sleep apnea (CompSA) a distinct clinical syndrome

and, if so, what criteria should be used to make the diagnosis ofCompSA?* What are the optimum positive airway pressure technologies
* available to patients with OSAS?
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| 4 | Intraoperative management of adult patients with OSA | Adult OSA undergoing elective surgeries | Intraoperative events (airway, anesthesia drugs & techniques, adverse events) | Are OSA patients* ..at increased risk for difficult airway management and do special precautions needed?
* ..at increased risk for postoperative respiratory complications with muscle relaxants?

..at increased risk for opioid-related respiratory events?* ..altered pain perception and opioid potency?
* ..at increased risk for adverse events from propofol use for procedural sedation?
* ..at increased risk for residual effects of inhalational anesthetics?
* ..at increased risk for adverse events from ketamine use?
* ..at increased risk for AEs from IV BZD sedation?
* ..at increased risk with α-2 agonists use?
* Does choice of muscle relaxant impacts postoperative respiratory complications?
* Should regional anesthesia be preferred over general?
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| 5 | Perioperative care of patients with OSAundergoing upper airway surgery | Adult OSA patients | Perioperative care of OSA patients undergoing upper airway surgery | To provide initial guide specifically addressing the perioperative care of OSA patients undergoing upper airway surgery |
| 6 | Perioperative OSA management in bariatric Surgery | OSA patients undergoing Metabolic & Bariatric surgery (MBS) | Perioperative care of OSA patients based on screening, treatment, monitoring, anesthesia and follow-up | To provide guidelines for * preoperative screening
* treatment
* postoperative monitoring
* anesthetic care

follow-up of OSA patients with metabolic syndrome. |
| 7 | Preoperative selection of adultpatients with OSA scheduled forambulatory surgery | Adult OSA patients scheduled for ambulatory surgery | Intraoperative, immediate postoperative and postdischarge periods during ambulatory surgeries | To guide appropriate selection of OSA patients scheduled for ambulatory surgery, aiming to reduce perioperative complications. |
| 8 | Perioperative Managementof patients with OSA | Adult and pediatric | Perioperative (anesthesia or sedation) | Management of patients with confirmed or suspected OSA because of potential difficulty in maintaining a patent airway |
| 9 | Anesthetic perioperative care and pain management in weight loss surgery | OSA patients undergoing weight loss surgery | Preoperative, intraoperative and postoperative management | To provide key aspects of anesthetic perioperative practice to * improve patient safety
* provide suggestions for medical error reduction
* systems improvements, credentialing, and future research
 |
| 10 | Diagnosis & treatment sleep disordered breathing | Adults with OSA | Perioperative care of OSA in Upper Airway Surgery (UAS) | No clear research questions formulated or objectives defined |