

Procedural Sedation Nitrous Oxide competency – theory

ALERT: This competency should precede the procedural sedation nitrous oxide competency – skill component. Completion of this competency in isolation does not indicate the nurse’s competency to administer nitrous oxide

Competency statement: The nurse has the requisite knowledge to assess and prepare a child and family for nitrous oxide sedation and to safely and effectively administer nitrous oxide throughout the sedation period

RCH references related to this competency: RCH Website - Comfort Kids – For Health Professionals has all links to the nitrous oxide resources, EMR Sedation order set and Sedation Narrator

COMPETENCY ELEMENTS	
K	<ol style="list-style-type: none"> 1. Locate & read (see Comfort Kids Program Website For Health Professionals) <ol style="list-style-type: none"> a. Procedural Sedation Ward & Ambulatory areas (RCH Procedure) b. Procedural Pain Management (RCH CPG) c. Orientation package for nitrous oxide – how to guide d. EMR Sedation Narrator and Sedation Order Set e. Nitrous oxide PowerPoint presentation f. Complete Nitrous oxide Quiz & review your knowledge gaps 2. Discuss the role and responsibility of the “Sedationist” 3. Describe the pharmacological effects of nitrous oxide 4. Outline the fasting guidelines for nitrous oxide and the consent process 5. State the three RCH services available to provide procedural sedation advice/consultation and when this is required 6. Describe how to prepare a child/family for a nitrous oxide sedation event 7. If using the portable nitrous oxide delivery system (located in PICU) what is the requirement for checking nitrous oxide cylinder and for scavenging 8. Describe what considerations should be taken when administering nitrous oxide with another primary sedation agent or an opioid medication 9. State the appropriate gas flow rate (L/min) and reservoir bag size (L) for a child and adolescent 10. State what is required and the rationale for: <ol style="list-style-type: none"> a. Risk assessment b. Exclusion criteria c. Monitoring - Baseline and ongoing observation of vital signs d. Continual assessment of UMSS and maintaining verbal contact e. Line of sight clinical observation and appropriate staffing f. Maintaining a quiet environment g. Falls prevention h. Time out and positive identification i. Emergency equipment j. Occupational Health and Safety k. Nitrous oxide storage l. Post sedation discharge criteria m. EMR ordering of nitrous oxide and documentation using the sedation narrator n. Reporting adverse events 11. State the action required for: <ol style="list-style-type: none"> a. Equipment faults b. Loss of nitrous oxide or oxygen gas flow c. Failure to sedate or adequate analgesic effect 12. Describe the management and possible prevention of: <ol style="list-style-type: none"> a. Patient who is combative – including loss of facemask seal b. Patient who complains of nausea or vomits c. Patient who desaturates, is apnoeic or respiratory depressed d. Patient who is distress from double vision or hallucinations e. Patient who is excessive drooling or excessively sweating f. Patient who progresses to an unintended deeper level of sedation

	<p>g. Patient who is coughing or develops respiratory distress - include airway obstruction and laryngospasm</p> <p>h. Patient who has impaired coordination / balance</p> <p>13. State the maximum recommended time of administration (minutes) for nitrous oxide procedural sedation event</p> <p>14. State the location of the emergency equipment in your area</p>
S	Not Applicable

I have demonstrated the necessary knowledge, skills, abilities and attributes to be deemed competent in this competency. I acknowledge that ongoing development and maintenance of competency is my responsibility and will be evidenced in my Professional Practice Portfolio.

Please indicate if there is written feedback or reflections related to this competency in the designated section of the workbook

Nurse Name:
Date:

Signature:

Assessor Name:
Date:

Signature:

Procedural Sedation Nitrous Oxide competency – skill

ALERT: This competency should follow the procedural sedation nitrous oxide competency – theory component. Nurses must attain the competency elements INDEPENDENTLY in order to be considered competent

Competency statement: The nurse assesses and prepares a child and family for a procedure and safely and effectively administers nitrous oxide throughout the sedation period

RCH references related to this competency: RCH Website - Comfort Kids – For Health Professionals has all links to the nitrous oxide resources, EMR Sedation order set and Sedation Narrator

COMPETENCY ELEMENTS	
K	<ol style="list-style-type: none"> 1. State when the sedation period starts and ends 2. State how to assess and maintain a patent airway for your patient 3. State the function of the nitrous oxide delivery unit, include all components 4. State the two built in safety features on the nitrous oxide delivery unit, include the rationale 5. Identify the appropriate time and support personnel to delivery nitrous oxide
S	<ol style="list-style-type: none"> 6. Complete the "Prior to the sedation" section of the Sedation Narrator: <ol style="list-style-type: none"> a. Identify risk and to meet the criteria for nitrous oxide administration b. Obtain informed verbal consent and provide information (fact sheet) c. Obtain an order for nitrous oxide+/-additional analgesic+/- Topical LA use the sedation order set or MAR on the EMR 7. Demonstrate patient assessment, including correct sizing of the facemask 8. Demonstrate preparation of the child and parent, prior to the sedation event 9. Demonstrate the safety checks for the nitrous oxide delivery unit and assemble the disposable components of the unit, prior to the sedation event 10. Demonstrate preparation of treatment area and emergency equipment as per the Sedation Narrator, prior to the sedation event 11. Demonstrate how to turn on the scavenging system for the nitrous oxide gas and ensure compliance with Occupation Health and Safety standards 12. Demonstrate Time out or Positive Patient Identification 13. Demonstrate leadership as the "Sedationist": <ol style="list-style-type: none"> a. Clarify the roles of staff and family, prior to the sedation event b. State when the child is ready for the procedure to begin c. Direct staff and family, maintaining one leader and a calm environment 14. Demonstrate non pharmacological strategies, as part of the sedation event 15. Maintain line of sight and verbal contact throughout the sedation period 16. Demonstrate continuous monitoring of vital signs and UMSS, document as per the governing RCH Procedural Sedation procedure & Sedation Narrator 17. Deliver nitrous oxide making adjustment to: <ol style="list-style-type: none"> a. the concentration of nitrous oxide based on anxiety, pain and sedation requirements b. the gas flows based on the patients age (child or adolescent), breathing pattern and volume of gas in the reservoir bag c. the facemask in order to maintain a seal over the nose and mouth 18. Demonstrate safe and timely management of side effects or adverse events 19. Monitor administration time and communicates timing with the Proceduralist 20. Demonstrate delivery of oxygen post procedure for 3-5 minutes 21. Perform the "end of sedation period" assessment, include level of alertness and return to baseline vital signs 22. Demonstrate "recovery" positioning and handover of patient when indicated 23. Complete all documentation for the sedation event per the Sedation Narrator & MAR on the EMR 24. Demonstrate debrief of child and parent, include positive reinforcement 25. Discuss post sedation care with family and child, include falls prevention

	26. Discuss travel arrangements and supervision (for outpatients)
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I have demonstrated the necessary knowledge, skills, abilities and attributes to be deemed competent in independently administering nitrous oxide. The minimum recommended number of supervised nitrous oxide events, achieving independent administration, was undertaken and documented below. I acknowledge that ongoing development and maintenance of competency is my responsibility and will be evidenced in my Professional Practice Portfolio.

Please indicate if there is written feedback or reflections related to this competency in the designated section of the workbook

Nurse Name: _____ Signature: _____
 Date: _____

Assessor Name: _____ Signature: _____
 Date: _____

Record of Nitrous Oxide Administration			
<i>The recommended number of supervised nitrous oxide sedation events is based on prior experience of nitrous oxide administration. Refer to-Comfort Kids Website-For health professionals - nitrous oxide accreditation process</i>			
Event Number & Date	Feedback Prompts required Areas to improve	Outcome for Event Assisted - Repeat Independent - Competent	Assessor Signature & Designation