

Nitrous Oxide-Oxygen Sedation Competency Exam

PCC 149CD

Course #, Course Name PCC 149CD: Comprehensive Adult General Dentistry II		Examiner Name		Exam Date
Student Name	Student ID	Examiner Signature		This is an individual, high stakes exam.
Patient EHR # (if applicable)		Final Score	Factors 1-8	
		Total:		
Exam Name Nitrous Oxide CE		Passing Score:	≥ 42	≥ 18
		Total Possible:	60	25

Examiner name, exam date/start time, student name/ID, patient EHR# above must be completed before the exam can begin.

CODA Competency 2-10, Critical Thinking and Problem-Solving; 2-17, Treating Diverse Patients; 2-24e, Local Anesthesia	SOD Competency 1- Ethics and Professionalism, 2- Integrates and applies course-based knowledge, 4- Assesses patient, 5- Delivers safe care, 8- Legal and regulatory concepts
Exam Instructions	Learning Objectives
<ul style="list-style-type: none"> <input type="checkbox"/> You must have passed the overview quiz associated with this assessment BEFORE you start this assessment. <input type="checkbox"/> MUST be taken with an adult (18 years or older) non-UCSF dental student patient of record who will subsequently undergo operative, endodontic, periodontic, rest-seat preparation, natural tooth-supported bridge, or oral surgery dental treatment and requires nitrous oxide-oxygen sedation for the treatment. <ul style="list-style-type: none"> o Patients who present for an exam and/or prevention treatment (e.g. prophylaxis, sealants, SDF, etc) do not qualify unless there is an established gag reflex. Please note that it is okay for patients to have nitrous for these procedures even without an established gag reflex, just not for competency assessment. <input type="checkbox"/> MUST be taken in the predoctoral comprehensive care clinic. <input type="checkbox"/> If a factor cannot be properly assessed because an assessment opportunity was missed, it is considered to be a critical error. If the factor cannot be properly assessed because the integrity of the assessment comes into question, then the assessment may be disqualified. <input type="checkbox"/> This exam has two (2) parts: Factors 1-8 and Factors A-E. You must pass both parts to pass this exam. 	<ul style="list-style-type: none"> <input type="checkbox"/> Demonstrate critical thinking and clinical reasoning by formulating evidence-based, patient-centered treatment plans based on diagnoses, risk profiles, and patient's goals. <input type="checkbox"/> Provide an appropriate level of pain and anxiety control, including safe and effective administration of local anesthetics, and nitrous oxide-oxygen sedation <input type="checkbox"/> Assess the quality and outcome of care.
Outcome if Fail	
The exam is a 'No Pass' if the score is < 70%, or if there are any critical errors, or if the exam is not completed within the allotted time. The student is encouraged to seek guidance from the faculty examiner and/or course director for re-learning, and then must attempt the exam again, when deemed ready, on another patient as advised by the faculty examiner and their group practice leader.	

FACTOR 1: EQUIPMENT SET-UP: INFECTION CONTROL, SAFETY, SCAVENGE, TANKS & TAGS, MACHINE			
5 – Optimal	4	1	0 – Critical Error
<ul style="list-style-type: none"> Machine is cleaned and disinfected Correctly connected to scavenge Scavenge is assessed Turns on appropriate tanks and tank status TAG system maintained Machine is activated/turned on Name tag is worn 	<p>Has some deviation(s) from optimal that may include, but is not limited to:</p> <ul style="list-style-type: none"> Scavenge is connected, but the tubing leading to the high-volume suction is pinched Barrier on the machine exposes more than just the flow meter of the machine 	<p>Has major deviation(s) from optimal that may include, but is not limited to:</p> <ul style="list-style-type: none"> Barrier on the machine is missing, but machine was disinfected and cleaned Name tag is not worn Inappropriate use of treatment gloves TAG system is used inappropriately 	<ul style="list-style-type: none"> Scavenge is not assessed as functioning prior to beginning sedation Gross lack of knowledge of the machine, such as attempting to “open tanks” with incorrect mechanism Unable to determine need to turn on machine OR Gross lack of knowledge of how to operate the machine Lack of hand hygiene (before and after) gloving
Score Awarded:	Comments: <i>points taken off for reasons not specified above must be written here</i>		
FACTOR 2: PATIENT MANAGEMENT AND ORIENTATION TO N ₂ O-O ₂ SEDATION			
10 – Optimal	8	3	0 – Critical Error
<ul style="list-style-type: none"> Knowledgeable about the patient’s medical, dental, and social history Builds rapport with patient Speaks with patient in an upright chair position when explaining the procedure Positioned to maintain eye contact with the patient Provides explanation of procedure that includes: <ul style="list-style-type: none"> What will be done How it will be done What the patient can expect Ongoing consent process during titration 	<p>Has some deviation(s) from optimal that may include, but is not limited to:</p> <ul style="list-style-type: none"> Description of the sedation procedure misses 1 key point 	<p>Has major deviation(s) from optimal that may include, but is not limited to:</p> <ul style="list-style-type: none"> Explains procedure to the patient with the patient lying down 	<ul style="list-style-type: none"> Gross disrespect of patient, or lack of ability to maintain appropriate demeanor during the procedure Explanation to patient is inaccurate or missing more than one required element Practically unfamiliar with the patient’s medical, dental, and/or social history Practically skips orientation to N₂O-O₂ sedation because patient reports prior experience
Score Awarded:	Comments: <i>points taken off for reasons not specified above must be written here</i>		
FACTOR 3: NASAL HOOD PLACEMENT			
5 – Optimal	4	1	0 – Critical Error
<ul style="list-style-type: none"> Estimates patient’s tidal volume Positions patient in a supine position BEFORE placing nasal hood Assures the nasal hood is correctly adapted with no leaks, and adjusts accordingly if leaks are present Re-evaluates tidal volume after hood is placed 	<p>Has some deviation(s) from optimal that may include, but is not limited to:</p> <ul style="list-style-type: none"> Patient is in a partially supine position when the nasal hood is initially put on 	<p>Has major deviation(s) from optimal that may include, but is not limited to:</p> <ul style="list-style-type: none"> Nasal hood placed incorrectly (e.g. upside down), but is sealed 	<ul style="list-style-type: none"> Nasal hood is placed, or nearly placed without a tidal volume estimate and/or sufficient air in the mixing bag (less than 50% filled). Nasal hood is not stable during sedation Mixing bag falls below necessary volume Patient is upright when mask is placed
Score Awarded:	Comments: <i>points taken off for reasons not specified above must be written here</i>		

FACTOR 4: INDUCTION			
10 – Optimal	8	3	0 – Critical Error
<ul style="list-style-type: none"> Guides patient through sedation by communicating calmly, respectfully, consistently Minimizes talking by the patient except during assessments Offers the patient breathing suggestions to encourage abdominal breathing Utilizes supportive relaxation techniques to assist patient, as needed 	Has some deviation(s) from optimal that may include, but is not limited to: <ul style="list-style-type: none"> Encouragement of the patient to relax is inconsistent and/or sporadic 	Has major deviation(s) from optimal that may include, but is not limited to: <ul style="list-style-type: none"> Allows the patient to talk too much during induction, or creates side conversation Minimal encouragement of the patient to relax Encouragement to relax is impersonal 	Fails to address the need to support patient relaxation entirely – limits interaction to assessment of sedation only.
Score Awarded:	Comments: <i>points taken off for reasons not specified above must be written here</i>		
FACTOR 5: TITRATION			
10 – Optimal	8	3	0 – Critical Error
<ul style="list-style-type: none"> Assesses the patient both visually and by interview prior to determining need for additional titration Gains patient consent before each adjustment Adjusts ratio of gases in appropriate increments Using a timing device, waits one minute between adjustments before assessing for additional titration 	Has some deviation(s) from optimal that may include, but is not limited to: <ul style="list-style-type: none"> Timing device not used explicitly Increases N₂O before oxygen 	Has major deviation(s) from optimal that may include, but is not limited to: <ul style="list-style-type: none"> Offers increase within 15 seconds of optimal 60 second interval 	<ul style="list-style-type: none"> Initially titrates at more than 1L of N₂O Offers additional titration without assessing or obtaining patient consent prior to increasing N₂O. Increases N₂O in increments greater than .5 L Offers additional increase ≤30 seconds or 90+ seconds after last titration Fails to gain consent for adjustment of N₂O Titrate patient past 50:50 when patient is not experiencing <u>any</u> signs and/or symptoms
Score Awarded:	Comments:		
FACTOR 6: PATIENT MANAGEMENT: ASSESSMENT OF SEDATION			
10 – Optimal	8	3	0 – Critical Error
<ul style="list-style-type: none"> Thoroughly identifies signs and symptoms to determine baseline sedation <p><i>Baseline is defined as indifference to starting treatment. Baseline does not have to be reached for the patient to want to start treatment, nor student to pass assessment</i></p>	Has some deviation(s) from optimal that may include, but is not limited to: <ul style="list-style-type: none"> Identifies most signs and symptoms to determine baseline sedation 	Has major deviation(s) from optimal that may include, but is not limited to: <ul style="list-style-type: none"> Confuses signs and symptoms Relies only on signs or relies only on symptoms to establish baseline Asks patient to start procedure before sufficient indication that patient is at baseline 	<ul style="list-style-type: none"> Declares patient at baseline when they are not Unclear on signs and symptoms
Score Awarded:	Comments: <i>points taken off for reasons not specified above must be written here</i>		

FACTOR 7: POST-SEDATION			
5 – Optimal	4	1	0 – Critical Error
<ul style="list-style-type: none"> At conclusion of procedure of procedure, informs patient that pure oxygen administered for minimum of 5 minutes Patient assessed for full recovery prior to removal of nasal hood Post-sedation vitals taken and assessed in comparison to pre-sedation vitals 	Has some deviation(s) from optimal that may include, but is not limited to: <ul style="list-style-type: none"> Vitals not taken 	Has major deviation(s) from optimal that may include, but is not limited to: <ul style="list-style-type: none"> N₂O is stopped without patient consent 	<ul style="list-style-type: none"> Does not provide sufficient post-procedure oxygen Fails to adequately assess patient for full recovery.
Score Awarded:	Comments: <i>points taken off for reasons not specified above must be written here</i>		

FACTOR 8: DOCUMENTATION			
5 – Optimal	4	1	0 – Critical Error
<ul style="list-style-type: none"> Sedation record is completed accurately and thoroughly Informed consent form is completed Treatment note is well-written and includes all relevant information 	Has some deviation(s) from optimal that may include, but is not limited to: <ul style="list-style-type: none"> Sedation record is placed in the wrong chart Treatment note sedation occurred, but lacks some detail related to sedation or patient response to sedation 	Has major deviation(s) from optimal that may include, but is not limited to: <ul style="list-style-type: none"> Treatment note very terse and/or completely lacks information about patient response to sedation 	Incomplete chart notes of a critical nature such as lack of documentation of the oxygenation period, or falsification of patient data. <ul style="list-style-type: none"> No Nitrous Oxide/Oxygen (EPR2) form filled out for today's sedation session
Score Awarded:	Comments: <i>points taken off for reasons not specified above must be written here</i>		

Factor 1	Factor 2	Factor 3	Factor 4	Factor 5	Factor 6	Factor 7	Factor 8	TOTAL SCORE
___/5	___/10	___/5	___/10	___/10	___/10	___/5	___/5	___/60

FACTOR A: CRITICAL THINKING							
5	4	3	2	1	0	Score	Comments
Identifies clinical problem; critically interprets available evidence and understands nuance; coherently analyzes and defends clinical choices; synthesizes clinical findings with evidence to provide a persuasive argument for the best option(s); has insight into his/her own reasoning and decision-making.	Identifies clinical problem; gathers and critiques valid evidence; makes inferences about how evidence will relate to patient outcomes; describes the implications of various choices based on evidence; identifies best options based on the above.	Identifies clinical problem; gathers and discusses valid evidence and rejects inferior evidence; describes his/her reasoning process superficially; elaborates some options based on findings the above.	Identifies clinical problem; gathers basic clinical information and scientific evidence to aid in decision-making.	Identifies problem or question of interest, but is unable to reason further.	Learner cannot identify the problem of interest, is unable to gather information that would aid in decision-making, and bases decisions on opinions OR anecdotes rather than evidence.		
FACTOR B: COMMUNICATION & DIVERSE PATIENT POOL							
5	3	0	Score	Comments			
Does not turn back to patient. At or below eye level when speaking with patient. Communicates respectfully with patient taking into account health literacy. Recognizes need for and uses interpreter as appropriate. Discusses and incorporates patient's health-related beliefs as related to culture, religion, etc. into treatment plan or treatment.	Mostly does not turn back to patient. Mostly is at or below eye level when speaking with patient. Communicates respectfully with patient, taking into account health literacy. Does not recognize need for interpreter OR does not discuss or incorporate patient's health-related beliefs.	ANY of the following will result in a critical error: Overtly disrespectful OR recognizes need for interpreter and does not arrange for interpreter services OR disrespectfully discredits patient's beliefs.					
FACTOR C: INFECTION CONTROL							
5	3	0	Score	Comments			
Provider PPE appropriately worn throughout procedure and during cubicle breakdown including mask, gloves, protective eyewear, tied gown, closed shoes. Hair out of working space. Nametag on. Hand hygiene performed. Clean and contaminated areas maintained. No cross- contamination. Sharps are capped when on table.	Provider PPE worn mostly appropriately, but gown untied OR eyewear worn after clean gloves OR eyewear is not fully enclosed OR hair in face but has not touched treatment area	ANY of the following will result in a critical error: Gross cross- contamination including clean items placed in area of trash receptacle. PPE for patient or provider not worn during cubicle breakdown or while instruments are being used. Hair touches treatment area. Nametag not worn. Sharps uncapped on table.					

FACTOR D: PRIDE VALUES AND PROFESSIONALISM					
5	3	1	0	Score	Comments
Treats patient, peers, staff, and faculty with respect & contributes to a positive work environment. Puts patients' needs before own. Punctual and prepared. Displays honesty, integrity, and accountability.	Treats patient, peers, staff, and faculty with respect though may not contribute to a positive environment. Puts patients' needs first. Punctual and mostly prepared. Displays honesty, integrity, and accountability.	Prioritizes own needs ahead of patient care (patient safety is not compromised) or best practices, late or unprepared for patient care, disregards clinic safety measures.	ANY of the following will result in a critical error: Academic dishonesty, unethical behavior OR Treats patient, peers, staff, or faculty with gross disrespect OR Breaches clinic safety measures (start checks, unsupervised practice, unauthorized change of treatment plan, etc.).		
FACTOR E: SELF-ASSESSMENT					
5	3	0	Score	Comments	
Accurately assesses MOST strengths and areas for improvement in clinical performance, including patient management, infection control, and professionalism.	Accurately assesses SOME strengths and areas for improvement in clinical performance, including patient management, infection control, and professionalism.	Grossly inaccurate in ability to assess strengths and areas for improvement in clinical performance, including patient management, infection control, and professionalism.			
FACTORS A-E TOTAL SCORE				___/25	

SUMMARY OF SCORES/SUM OF SCORES:

Factors 1-11	Factors A-E
___/60	___/25
Pass ≥ 42	Pass ≥ 18

Any critical errors? Yes / No
Exam completed on time? Yes / No
<i>Any critical error or exam not completed on time will result in automatic failure of the exam.</i>

Outcome (circle one)	
PASS	FAIL